M.O.661

AIR MINISTRY
METEOROLOGICAL OFFICE

THE OBSERVATORIES' YEAR BOOK

1947

Comprising the meteorological and geophysical results obtained from autographic records and eye observations at the Lerwick, Aberdeen, Eskdalemuir, and Kew Observatories

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PREFACE

The *Observatories' Year Book* was published for the years 1922 to 1937 in continuation of Part III Section II and Part IV of the *British Meteorological and Magnetic Year Book* for the period 1908 to 1921.

Publication of the *Observatories' Year Book* was necessarily suspended during the 1939–45 war. Restrictions on supplies and printing since the war resulted in a regrettably long delay in the resumption of publication. In face of the formidable accumulation of arrears, and taking changed requirements into account, it was decided to adopt an abridged form as outlined below.

It was arranged that the General Introduction to the Meteorological Tables and the parts of the Sectional Introductions which deal with site, instruments, procedure and tabulation included in the volume for 1938 should serve as standards of reference for many years; and that only important departures from these standards, together with any requisite additional information, should be included in the relevant parts of the volume for the years after 1938. As compared with the volumes before 1938, the space devoted to the discussion of observations is reduced. Monthly tables of individual hourly values of meteorological elements are omitted, but summaries of daily mean values (or totals), monthly means (or totals) of hourly values and some maximum and minimum values are given. The diary of cloud, weather and visibility is also omitted. No major changes have been made in the atmospheric electrical and magnetic tables. The aerological and seismological tables were discontinued after 1939.

The present volume, 1947, presents atmospheric electrical and geomagnetic data for Lerwick Observatory; meteorological data for Aberdeen; meteorological, atmospheric electrical and geomagnetic data for Eskdalemuir; meteorological, atmospheric electrical and atmospheric pollution data for Kew. Aberdeen Observatory closed at the end of 1947.

Manuscript tabulations of hourly values of the meteorological elements are available at the observatories. Requests for information from the tabulations should be addressed to the Director-General, Meteorological Office, Air Ministry, Victory House, Kingsway, London, W.C.2.

Notes on the tables:- Maximum and minimum values are shown in italics.

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ERRATA

1941

Page 122, under "Atmospheric Electricity" line 10 amend "44 x 10^{-18} ohm.$^{-1}$ cm.$^{-2}$" to read "44 x 10^{-18} ohm.$^{-1}$ cm.$^{-1}$"

Page 123, between end of first paragraph and beginning of second paragraph insert heading "SEISMOLOGY".

LERWICK

LERWICK OBSERVATORY

Latitude	60°08′N.
Longitude	1°11′W.
G.M.T. of Local Mean Noon ..	12h. 5m.
Height of site above M.S.L.	80 to 90 metres

INTRODUCTION

Full details of the site, instruments, procedure and tabulations are given in the *Observatories' Year Book*, 1938. Only important changes and additions are mentioned here.

Atmospheric electricity

No changes were made in 1947.

Terrestrial magnetism

Until 1946 the chamber was unheated but in June of that year small, low-temperature thermostatically controlled a.c. electric heaters were installed in order to reduce the persistent damp. The diurnal variation of temperature has continued negligibly small.

The average day-to-day change of temperature in the magnetograph house for each of the twelve months of 1947 and for the year as a whole was as follows (in degrees Absolute):

Jan.	*Feb.*	*Mar.*	*Apr.*	*May*	*June*	*July*	*Aug.*	*Sept.*	*Oct.*	*Nov.*	*Dec.*	*Year*
0.58	0.25	0.34	0.28	0.47	0.46	0.34	0.25	0.58	0.43	0.86	0.48	0.44

There were 34 occasions on which the change reached or exceeded 1°A.

Notes on the results

Beginning with 1947 some changes have been made in the tables accompanying these notes. The month by month commentary on the autographic records has been omitted, and a change has been made in the table formerly headed "Principal magnetic disturbances". It is intended that all the disturbances, which would have been included in the previous type of table, will still be included, with, however, additional disturbances of the form of sudden commencements and those which can be recognised as being solar flare effects. The table is thus divided into three parts:

(a) Disturbances noteworthy for some reason (usually, but not always, range) and without a sudden commencement.

(b) Well-marked sudden commencements whether followed by a large disturbance or not.

(c) Disturbances accompanying a solar flare or other known solar flare effect.

The time given of commencement and ending of disturbances in (a) must depend on an arbitrary judgment. The list of sudden commencements under (b) will usually be a little shorter than that given in the International Association of Terrestrial Magnetism and Electricity Bulletins because a somewhat stricter meaning has been given to the words "well marked", and also because the sharp beginnings of small polar disturbances have been omitted. The (c) table has been made as complete as possible by a careful scrutiny of the magnetograms

at the time of any known solar flare or solar flare effect, but a small "crochet" can easily be masked by other disturbance. The signs given to the movements of *H*, *D*, and *V* are positive for increasing *H*, *V* and an increase of force towards the east (that is a decreasing westerly declination).

Particulars of the same disturbances are given in both the Lerwick and the Eskdalemuir sections of the *Observatories' Year Book*, even if the disturbance at one of the stations is relatively small.

The factor to change variations of *D* expressed in minutes of arc to units of force (γ) perpendicular to the magnetic meridian was approximately 4·18. Comparing the mean values for all days of 1947 with those for 1946 it is noted that *H* remained constant, *D* (west) decreased by 8′·5 and *V* increased by 13γ. The ranges between the extreme values recorded in 1947 were *H* 2167γ, *D* 4° 21′·1 and *V* 1364γ.

The *K* index is fully described in *Terrestrial magnetism and atmospheric electricity*.* Briefly, a figure is allotted on a scale 0–9 to each 3-hour interval. The figure is a measure of the range of magnetic force during that period, measured from a curved line which represents the normal quiet-day variation. The figures are first allotted from the *H* magnetogram and then increased, if necessary, by inspection of the *D* and *V* curves, so that the most disturbed component determines the final figure. The scale of ranges in γ corresponding to the figures 0–9 varies from observatory to observatory. The lower limit of each number for Lerwick is:

K	0	1	2	3	4	5	6	7	8	9
Range in γ	0	10	20	40	80	140	240	400	660	1000

TABLE 1 — ABSOLUTE DAILY RANGE AND MEAN MONTHLY VALUES

	Mean absolute daily range						Mean daily range expressed as percentage of yearly mean					
	1947			Mean 1932–42			1947			Mean 1932–42		
	H	*D*	*V*	*H*	*D*	*V*	*H*	*D*	*V*	*H*	*D*	*V*
	γ	γ	γ	γ	γ	γ	%	%	%	%	%	%
January	98	85	94	94	96	96	42	63	58	65	92	80
February	128	101	110	110	106	114	58	75	67	76	102	95
March	388	242	271	196	138	165	175	181	166	136	133	137
April	223	123	153	205	123	160	101	91	93	143	118	133
May	166	109	119	181	103	129	75	81	73	126	99	107
June	228	127	148	135	88	100	103	94	91	94	84	83
July	204	117	137	153	90	107	92	87	84	106	86	89
August	312	166	232	151	98	108	141	122	142	105	94	90
September	439	189	291	159	114	138	198	140	178	111	110	115
October	272	173	211	160	119	141	123	128	129	111	114	117
November	146	100	116	93	92	99	66	74	71	65	88	82
December	60	84	81	85	87	88	27	62	50	59	84	73
Winter	108	93	100	96	95	100	48	69	61	67	91	83
Equinox	331	182	231	180	124	151	150	135	141	125	119	126
Summer	227	130	159	155	95	111	102	96	97	108	91	92
Year	222	135	163	144	104	120	..	..	..	..	..	..

"Winter" comprises the four months January, February, November, December; "Equinox" the months March, April, September, October; and "Summer" May to August.

* BARTELS, J., HECK, N.H. AND JOHNSTON, H.F.; The three-hour-range index measuring geomagnetic activity. *Terr. Magn. atmos. Elect., Baltimore*, **44**, 1939, p.411.

TABLE 2 – FREQUENCY DISTRIBUTION OF ABSOLUTE DAILY RANGE

Range	Number of cases, 1947			Percentage distribution					
				H		*D*		*V*	
	H	*D*	*V*	1947	1932–42	1947	1932–42	1947	1932–42
γ				%	%	%	%	%	%
0 – 9	0	0	0	0·0	0·0	0·0	0·0	0·0	3·0
10 – 19	2	3	23	0·5	1·0	0·8	0·4	6·3	15·8
20 – 29	13	7	22	3·6	4·2	1·9	2·9	6·0	22·1
30 – 39	11	5	26	3·0	6·6	1·4	5·7	7·1	16·8
40 – 49	25	18	21	6·9	8·7	4·9	8·0	5·8	9·5
50 – 59	21	12	26	5·8	11·4	3·3	13·2	7·1	6·9
60 – 69	20	26	27	5·5	13·2	7·1	14·0	7·4	5·1
70 – 79	23	27	16	6·3	10·6	7·4	12·5	4·4	3·4
80 – 89	25	42	8	6·9	9·3	11·5	10·3	2·2	2·7
90 – 99	17	41	16	4·7	6·9	11·2	7·8	4·4	2·3
100 – 109	10	41	9	2·7	5·3	11·2	5·3	2·5	1·8
110 – 119	19	21	10	5·2	4·5	5·8	3·8	2·7	1·4
120 – 129	15	16	8	4·1	2·9	4·4	3·3	2·2	1·4
130 – 139	16	10	4	4·4	2·7	2·7	2·5	1·1	0·9
140 – 149	17	8	11	4·7	1·8	2·2	1·8	3·0	0·8
150 – 159	10	9	12	2·7	1·9	2·5	1·6	3·3	0·4
160 – 169	8	4	7	2·2	1·3	1·1	1·4	1·9	0·5
170 – 179	6	8	4	1·6	1·0	2·2	0·8	1·1	0·2
180 – 189	6	7	0	1·6	0·8	1·9	0·8	0·0	0·5
190 – 199	3	9	10	0·8	0·6	2·5	0·7	2·7	0·4
200 +	98	51	105	26·7	5·2	14·0	3·1	28·8	4·0
Days omitted	0	0	0	..	..	..	..	..	..

TABLE 3 – AVERAGE RANGE OF DIURNAL INEQUALITY 1932–42
WITH 1947 AS A PERCENTAGE OF THIS

		All days			International quiet days			International disturbed days		
		V	*H*	*D*	*V*	*H*	*D*	*V*	*H*	*D*
		γ	γ	′	γ	γ	′	γ	γ	′
Year	1932–42	47·5	46·7	9·04	9·3	36·5	8·30	118·9	117·1	13·55
	1947(%)	137	157	131	116	143	142	125	165	133
Winter	1932–42	38·0	23·4	7·06	7·3	14·7	4·32	110·2	79·3	12·83
	1947(%)	104	129	113	86	168	133	155	129	136
Equinox	1932–42	60·0	54·3	10·60	11·6	41·4	9·25	150·3	167·2	18·61
	1947(%)	147	173	133	83	143	140	111	206	133
Summer	1932–42	47·6	69·7	12·38	15·6	55·8	12·14	124·3	140·3	14·59
	1947(%)	148	147	134	123	135	142	108	145	118

"Winter" comprises the four months January, February, November, December; "Equinox" the months March, April, September, October; and "Summer" May to August.

TABLE 4 – RATIO OF RANGE OF INEQUALITY AT LERWICK TO THAT AT ESKDALEMUIR 1947

Type of day	Element	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
q	*D*	0·94	0·95	1·02	0·98	1·07	1·04	1·07	1·08	1·02	0·92	1·12	1·19
d	*D*	1·22	1·18	1·81	1·15	1·14	1·11	1·33	1·07	1·48	1·19	1·36	1·27
q	*H*	0·92	0·90	1·00	1·04	1·21	1·07	1·26	1·07	1·10	1·01	1·02	1·01
d	*H*	2·27	2·38	1·93	2·19	1·59	2·12	1·75	2·29	2·83	3·73	3·58	1·22
q	*V*	1·10	0·81	1·04	0·73	0·75	1·19	0·76	0·91	1·10	0·54	1·65	1·52
d	*V*	2·10	1·60	1·00	1·72	2·35	1·67	1·57	1·58	1·07	1·88	1·41	2·24

TABLE 5 – NOTEWORTHY MAGNETIC DISTURBANCES AT LERWICK

(a) Disturbances without S.C's

Serial Number	From		To		Range (γ)			Notes
	Date	Hour	Date	Hour	*H*	*D*	*V*	
1a	Mar. 2	08	Mar. 4	09	1524	1071	1228	
2a	Mar. 8	11	Mar. 9	09	1325	820	744	
3a	Aug. 22	09	Aug. 23	07	1181	668	879	
4a	Sept. 24	12	Sept. 25	08	1832	1058	1028	
5a	Oct. 2	09	Oct. 3	08	1185	608	578	
6a	Oct. 9	12	Oct. 12	21	1073	524	591	
7a	Nov. 9	09	Nov. 10	03	876	376	597	

(b) Disturbances with a S.C.

Serial Number	Date	Time of S.C.	End of Disturbance Date	Hour	With initial reversed stroke *H*	*D*	*V*	Magnitude main stroke of S.C. *H*	*D*	*V*	Range of following disturbance (γ) *H*	*D*	*V*
								γ	γ	γ			
1b	Jan. 4	11.16			Yes	Yes	Yes	+32	+20	−12		Small	
2b	Jan. 24	06.20	Jan. 28	05	Yes	Yes	Yes	−11	−9	−6	596	232	345
3b	Feb. 8	08.07	Feb. 10	18	No	No	No	+8	−6	−1	556	236	351
4b	Feb. 16	02.59	Feb. 20	16	Yes	Yes	Yes	+18	−19	−4	745	374	474
5b	Mar. 7	05.35			Yes	Yes	Yes	+12	−21	−5		Small	
6b	Mar. 15	08.41	Mar. 17	10	Yes	Yes	Yes	−47	+59	−40	1224	296	423
7b	Apr. 3	15.02			Yes	Yes	Yes	+30	−4	+5		Small	
8b	Apr. 8	21.51	Apr. 9	20	Yes	Yes	Yes	+64	−22	−20	529	218	360
9b	Apr. 17	12.24	Apr. 20	24	Yes	Yes	Yes	+60	+54	−12	1867	596	980
10b	May 22	22.43			Yes	Yes	Yes	+44	−25	−12		Small	
11b	June 13	17.49	June 15	09	Yes	Yes	Yes	+75	−25	−30	1035	414	476
12b	June 17	03.00	June 18	03	No	Yes	No	+20	−25	−1	396	198	300
13b	July 17	17.50	July 20	23	Yes	Yes	Yes	+200	−15	−28	1073	561	1029
14b	Aug. 15	09.51	Aug. 21	22	Yes	Yes	Yes	+36	+63	−10	964	375	773
15b	Sept. 4	13.46			No	No	No	+80	−21	−18		Small	
16b	Sept. 30	18.09			Yes	Yes	Yes	+40	−17	−8		Small	
17b	Nov. 16	22.39			No	No	Yes	+36	−25	−15		Small	
18b	Nov. 24	17.55	Nov. 24	24	Yes	No	Yes	+32	−10	−6	312	163	143

(c) Disturbances due to Solar Flare

Serial Number	Date	Commence-ment	Max.	End	Movement (γ) *H*	*D*	*V*	*K*	*K'*	Flare or S.F.E.
1c	Jan. 14	09.49	09.53	10.00	-4	-2	+3	1	1	F.O.
2c	Mar. 5	09.28	09.30	09.38	-10	-10	+3	2	2	F.O.
3c	Apr. 6	11.52	11.57	12.12	-43	+10	+18	3	3	F.O.
4c	May 6	10.12	10.15	10.25	-14	+4	+6	2	2	F.O.
5c	Aug. 1	15.17	15.19	15.22	-2	+29	+6	3	3	Flare class 2. F.O.

F.O. = Fade out.

POTENTIAL GRADIENT (reduced to level surface)
Mean values for periods of sixty minutes between exact hours, G.M.T.

6 LERWICK

	JANUARY, factor 0·99				FEBRUARY, factor 1·00				MARCH, factor 1·03			
	2-3h.	8-9h.	14-15h.	20-21h.	2-3h.	8-9h.	14-15h.	20-21h.	2-3h.	8-9h.	14-15h.	20-21h.
	volts per metre											
1	146	129	93	96	114	107	117	79	175	161	286	520
2	199	–	242	166	141	117	>28	76	87	98	175	140
3	136	143	43	–	97	55	121	145	91	>250	>297	322
4	–40	–	–543	97	114	66	173	210	–	–	–	–
5	73	77	47	30	100	135	173	145	84	116	604	186
6	27	43	43	103	110	90	86	173	137	–105	133	246
7	90	107	107	110	–	–	235	152	70	>527	169	207
8	94	97	80	33	135	–241	155	145	116	120	183	–53
9	70	80	64	131	138	135	156	138	109	99	113	141
10	127	<–539	–	101	138	173	166	104	109	173	134	208
11	–	134	102	168	104	135	138	175	208	328	198	105
12	–	71	242	–	73	125	149	215	71	106	127	124
13	>410	–	252	–	170	142	384	–	35	135	96	142
14	–	–	–	–	–	242	149	170	107	323	646	344
15	–	–	–	41	135	104	107	170	36	4	>427	71
16	–	–	64	85	87	73	135	104	142	36	–21	142
17	105	–	Z±	78	35	76	138	83	171	71	121	107
18	71	98	166	170	69	142	135	135	107	75	82	97
19	105	105	–	–	–194	90	142	139	100	104	147	208
20	44	99	–	–	–	–	239	194	431	108	–	–
21	–	–	–	341	167	219	208	215	–	–	72	–
22	95	106	133	174	153	160	Z±	171	–114	143	251	355
23	113	300	133	116	143	184	466	174	165	252	–	216
24	85	85	–	20	251	>174	532	–	–353	18	86	104
25	44	68	198	99	Z–	111	115	174	>354	90	111	108
26	38	48	69	69	52	209	104	216	169	152	18	217
27	–	–	432	75	101	241	719	276	340	532	0	–
28	134	99	99	99	119	<–401	Z±	251	239	141	80	174
29	69	76	93	62					163	167	149	79
30	103	Z±	138	203					40	76	80	55
31	158	100	131	113					171	106	116	215
(a)	110	103	135	111	119	138	203	163	149	161	182	186
(b)	87	102	107	100	93	112	181	156	101	135	185	177
Mean	(a) 115		(b) 99		(a) 156		(b) 135		(a) 171		(b) 149	

	APRIL, factor 1·14				MAY, factor 1·19				JUNE, factor 1·17			
	2-3h.	8-9h.	14-15h.	20-21h.	2-3h.	8-9h.	14-15h.	20-21h.	2-3h.	8-9h.	14-15h.	20-21h.
	volts per metre											
1	91	117	157	153	132	124	180	124	146	73	37	203
2	139	106	212	190	72	113	193	161	81	89	–	–
3	143	154	179	183	–	–	–	–	77	121	109	117
4	327	121	294	150	–	–	–	–	57	73	202	89
5	107	110	–537	>802	–	–	–	–	282	431	286	274
6	63	7	74	177	244	130	240	240	269	197	350	20
7	–387	118	166	159	249	135	213	213	96	4	–	–125
8	104	70	115	170	279	324	205	180	88	72	60	125
9	108	120	148	167	–	–	–	–	116	120	96	132
10	167	–56	–506	145	–	–	–	–	–	–	–	–
11	60	93	190	272	202	289	165	194	–	–	–	–
12	>1245	120	112	131	–	–	–	–	–	–	–	–
13	83	113	263	206	–	–	–	–	96	48	56	96
14	0	86	113	79	–	–	–	–	–52	48	76	168
15	57	–4	211	294	498	282	320	208	192	172	–48	–128
16	–34	19	42	79	303	133	42	158	68	160	128	209
17	38	53	<–456	87	79	141	174	220	92	281	350	245
18	53	84	110	114	–	–	–	–	712	241	92	277
19	99	<–1604	267	1073	–	–	–	–	121	117	165	1106
20	<–414	127	257	–46	124	124	137	124	370	314	358	289
21	116	123	<–974	58	108	161	215	178	241	310	237	261
22	186	163	108	186	91	46	199	–8	209	213	197	201
23	74	120	334	109	–62	–37	21	161	237	249	245	156
24	31	–	117	195	41	119	198	144	281	354	281	402
25	>352	102	152	305	165	78	136	–	–515	–430	–56	24
26	–472	161	118	–157	–	–	321	494	77	32	330	367
27	20	–315	142	43	234	410	320	328	202	351	–	–
28	87	352	190	83	209	168	237	294	–	145	206	206
29	111	119	79	119	241	208	326	249	360	202	–12	Z–
30	76	84	152	–72	506	131	155	155	Z–	206	32	109
31					195	167	151	81				
(a)	151	114	165	212	209	173	198	205	190	178	185	231
(b)	90	30	59	180	200	167	194	179	151	143	169	221
Mean	(a) 162		(b) 90		(a) 196		(b) 185		(a) 196		(b) 171	

The potential gradient is reckoned as positive if the potential increases upwards. For indeterminate potential gradient the following notation is used: Z+, indeterminate, positive value; Z–, indeterminate, negative value; Z±, indeterminate, in magnitude and sign.

(a) Mean of all positive readings.

(b) Mean from all complete days using both positive and negative readings.

POTENTIAL GRADIENT (reduced to level surface)

Mean values for periods of sixty minutes between exact hours, G.M.T.

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	JULY, factor 1·18				AUGUST, factor 1·19				SEPTEMBER, factor 1·20			
	2-3h.	8-9h.	14-15h.	20-21h.	2-3h.	8-9h.	14-15h.	20-21h.	2-3h.	8-9h.	14-15h.	20-21h.
	volts per metre											
1	–	105	85	158	82	122	126	204	161	124	–45	74
2	81	149	174	255	212	440	437	400	32	115	25	37
3	250	69	81	162	400	388	204	122	–12	111	–4	4
4	85	81	202	323	61	8	12	12	54	128	144	161
5	93	170	24	89	118	78	86	8	82	87	45	82
6	81	65	36	–12	192	123	119	139	78	37	0	74
7	81	65	218	117	82	78	86	135	41	78	–288	54
8	170	166	288	198	78	123	168	241	54	78	49	165
9	113	–81	8	53	130	196	213	192	363	78	124	128
10	65	81	–61	194	143	213	245	209	87	62	45	169
11	170	–20	243	239	115	106	65	115	–37	288	144	–
12	263	190	130	117	82	82	143	164	–	–	–	–
13	122	284	49	130	164	37	82	53	–161	128	25	–82
14	77	122	199	248	–	171	213	319	87	198	243	247
15	621	589	564	759	283	217	160	344	288	210	231	202
16	248	134	122	158	205	271	135	127	729	404	49	Z–
17	–	–	–	–	164	111	78	33	33	78	404	128
18	122	41	93	85	41	29	53	135	–	–	–	–
19	272	154	0	414	180	152	156	230	87	161	367	173
20	61	41	41	4	115	143	201	131	293	540	375	284
21	61	28	–16	166	–41	123	86	160	420	350	161	124
22	37	73	394	166	61	66	82	156	91	260	816	869
23	191	252	–264	195	90	131	90	–	115	164	251	58
24	77	203	89	106	–	–	–	–	–	–	–	–
25	65	4	77	81	49	82	103	119	925	1150	Z–	148
26	65	49	61	94	82	90	119	201	–	–	–	–
27	118	90	86	142	156	169	205	284	–	–	–	–
28	155	212	159	118	148	136	115	144	131	>255	403	Z–
29	110	106	94	90	227	–	124	247	<–205	>291	291	217
30	24	41	41	212	87	91	115	206	266	–41	271	176
31	106	78	110	78	37	169	111	144				
(a)	137	130	136	245	134	143	138	171	210	224	213	170
(b)	137	119	112	172	127	142	137	163	107	154	168	150
Mean	(a) 162		(b) 135		(a) 147		(b) 142		(a) 204		(b) 147	

	OCTOBER, factor 1·19				NOVEMBER, factor 1·17				DECEMBER, factor 1·15			
	2-3h.	8-9h.	14-15h.	20-21h.	2-3h.	8-9h.	14-15h.	20-21h.	2-3h.	8-9h.	14-15h.	20-21h.
	volts per metre											
1	197	61	521	41	164	Z–	397	11	83	16	419	629
2	–66	86	373	1025	111	122	286	270	>577	Z–	–	–
3	820	–	–	787	Z–	79	164	191	47	21	31	41
4	701	1070	783	705	90	42	42	11	36	83	316	223
5	286	Z–	>115	401	11	58	85	153	124	300	–26	119
6	858	761	892	335	90	53	100	127	316	Z–	352	280
7	41	511	49	–8	79	11	42	660	207	487	254	326
8	843	192	–	–	269	528	477	470	15	171	52	119
9	Z–	266	–37	–405	–	–	–	–	72	108	170	237
10	–53	–20	–106	–143	–	–	306	364	144	253	206	31
11	–	–	–	171	231	310	273	273	–5	21	232	237
12	237	204	–	–	326	310	310	263	139	93	268	88
13	–	571	–	–	268	747	395	337	–	–	–	–
14	–	–	–	–	300	537	431	405	51	155	175	100
15	–	<–80	–	1632	630	215	236	210	139	123	154	–15
16	2140	<–107	375	139	–	–	430	466	–21	–57	–72	103
17	64	96	64	107	540	157	870	802	51	51	134	206
18	11	187	0	331	472	393	508	152	62	87	77	93
19	160	59	117	149	47	173	110	126	103	92	77	215
20	203	155	374	271	63	105	528	382	102	143	512	159
21	133	75	–	107	26	319	492	256	–26	0	–51	26
22	330	309	373	288	209	–	–	–	51	56	128	61
23	208	235	213	187	308	762	256	Z–	0	97	26	10
24	255	170	325	218	Z–	Z–	141	240	51	56	128	15
25	165	133	154	149	224	658	423	371	215	250	56	5
26	96	64	43	27	302	307	370	271	0	5	–61	61
27	0	32	0	96	302	349	354	271	20	107	148	–10
28	–5	48	80	111	–68	1078	271	875	77	97	107	219
29	–11	27	42	5	307	229	276	354	112	117	229	148
30	–	–	21	101	–52	130	941	78	178	112	326	188
31	–	–	79	180					188	198	56	163
(a)	408	241	238	315	233	320	338	311	117	127	185	152
(b)	279	204	246	212	208	311	342	323	79	116	145	136
Mean	(a) 301		(b) 235		(a) 301		(b) 271		(a) 145		(b) 119	

The factor used for converting the potential at the collector to potential gradient in volts per metre in the open is given for each month.

Annual means					
(a)	181	171	193	203
(b)	138	145	170	181
	(a) 187		(b) 159	

POTENTIAL GRADIENT (reduced to level surface): DIURNAL INEQUALITIES
The departures from the mean of the day are adjusted for non-cyclic change†

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	Hour G.M.T. 0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	Non-cyclic change†	No. of days used	Mean
	volts per metre																										v./m.
	0a days only*																										
Jan.	-4	-2	-18	-12	-12	-3	-9	-10	-2	-6	+18	+6	+11	+20	-2	-6	-9	-3	+38	+27	0	-14	+4	-10	+1	1	109
Feb.	-36	-21	-10	-3	+1	-3	+2	+7	+13	+9	+15	+2	-9	+9	+23	+17	+3	-2	+3	+12	-5	+3	-7	-25	-1	5	141
Mar.	-26	-39	-10	-43	+30	+36	+21	+44	+29	-13	-35	-7	+9	+19	-5	-7	-9	0	+2	+48	+5	+3	-15	-40	-14	4	138
Apr.	+25	+34	-35	-23	-32	-62	+10	+35	-16	-23	-15	+13	+10	+16	+19	-23	-11	+20	-10	+64	+45	-24	-4	-13	-29	1	131
May	+43	+23	+13	-8	-12	-2	0	+4	-10	-13	-35	-35	-36	-3	+8	+11	+12	0	+10	+11	+12	0	+3	+4	-61	14	191
June	-12	-51	-31	-9	+54	+22	+7	+23	+38	+61	+43	+25	-4	+2	+6	+18	+12	-1	-7	-39	-43	-43	-42	-30	+41	5	227
July	+20	-9	+1	+4	+12	+1	-24	-28	-16	-29	-25	+7	+11	+5	-3	-16	-29	-21	-16	-6	+40	+60	+25	+36	+5	11	172
Aug.	+9	-6	-12	-24	-2	+13	+24	+10	-3	+11	-2	-20	-26	-19	-9	-16	-8	-4	-7	+7	+24	+27	+17	+18	-4	21	152
Sept.	-88	-87	-78	-50	-45	-49	-16	-15	-2	-15	-23	-6	-5	+41	+16	0	-9	-20	+9	-39	+35	+117	+129	+200	-8	1	129
Oct.	+7	-19	-4	-3	-35	-7	-35	+4	-34	-23	-28	+11	+3	-4	+61	+65	+20	0	+9	+15	+11	-1	-5	-10	-63	3	230
Nov.	+154	-51	-31	-110	-74	-74	-103	-107	-82	-16	-52	-54	-116	-39	-8	+38	+67	+37	+30	+107	+97	+122	+135	+130	-107	1	296
Dec.	-25	-31	-58	-46	-49	-55	-51	-54	-42	-6	+3	+96	+61	+19	+41	+27	+45	+39	+36	+42	+29	0	-16	-5	+17	2	157
Year	+6	-22	-23	-27	-14	-15	-15	-7	-11	-5	-11	+3	-8	+5	+12	+9	+7	+4	+8	+21	+21	+21	+19	+21	-19	69	173
Winter	+22	-26	-29	-43	-34	-34	-40	-41	-28	-5	-4	+13	-13	+2	-13	+19	+26	+18	+27	+47	+30	+28	+29	+23	-23	9	176
Equinox	-20	-28	-31	-30	-20	-20	-5	+17	-6	-19	-25	+3	+5	+18	+23	+9	-2	0	+2	+22	+24	+24	+26	+35	-29	9	157
Summer	+15	-11	-7	-9	+11	+8	+1	+2	+2	+7	-5	-6	-13	-4	+1	-1	-3	-7	-5	-7	+8	+11	+1	+7	-5	51	185
	1a and 2a days only*																										
Jan.	+6	-8	-5	-8	-6	-14	-3	-5	+2	+3	-19	-18	+9	-11	+1	+5	+26	+19	+8	0	-5	+18	+4	-2	+24	4	80
Feb.	-9	-27	-24	-2r	-26	-29	-31	-27	-29	-13	-24	-36	-28	-11	+3	+27	+15	+33	+85	+80	+11	+23	+67	+5	+42	2	134
Mar.	-3	+7	+11	-35	-23	-26	-21	-22	-4	+65	0	0	+5	+2	+3	-7	-27	+16	+5	+38	+3	+24	+10	0	+7	7	110
Apr.	-41	-38	-41	-25	-31	-47	-35	-19	-43	-24	+8	-7	+19	+31	+6	+21	+37	+90	+89	+57	+47	+10	-22	-43	+8	7	123
May	+27	+31	-19	-48	-11	+2	+28	-15	-23	-26	-16	+20	+43	+23	+45	+49	+35	+22	-27	+30	+1	-111	-42	-18	+5	4	95
June	0	-38	-23	+11	+18	+10	-13	-50	-30	-14	-17	+29	-16	+11	+12	-26	-68	+1	+14	+52	+59	+51	+19	+8	+20	5	120
July	+41	+22	-9	+6	+35	+45	+18	-20	-24	+4	-17	-21	-22	-10	-33	-23	-34	-47	-8	-2	+19	+6	+22	+52	-1	12	116
Aug.	+7	-31	-42	-49	-38	-29	-11	-1	+2	0	+33	+14	+8	-30	+8	+7	+13	+23	+28	+10	+18	+37	+10	+12	-15	6	111
Sept.	-56	-10	-1	0	+8	+1	-5	+28	+12	+30	+20	+11	+22	+1	-22	-30	-18	-16	+4	+9	+13	+11	-15	+2	-59	7	113
Oct.	+19	+9	-23	-66	-11	-15	-4	-10	-12	-41	-44	-31	-36	-59	-8	+44	+74	+49	+23	+24	+37	+36	+19	+26	-7	6	144
Nov.	-62	+9	-49	-29	+28	-6	-12	-9	+14	+34	+26	-58	-4	-53	-51	-10	+56	-62	+55	+109	+107	+26	-13	-46	-36	7	185
Dec.	+2	-20	-17	-9	-16	-26	-24	-20	-11	0	+14	+37	+33	+6	+19	-4	+39	+23	-33	+17	-5	-4	-8	+8	+47	17	88
Year	-6	-8	-21	-23	-6	-11	-9	-14	-14	-4	+2	-5	+3	-8	-1	+4	+12	+13	+20	+35	+25	+11	+4	0	+3	84	118
Winter	-16	-11	-27	-17	-5	-19	-17	-15	-6	+6	-1	-19	+3	-17	-7	+5	+34	+3	+29	+51	+27	+16	+13	-9	+19	30	122
Equinox	-20	-8	-13	-31	-14	-22	-16	-5	-16	-10	+12	-7	+3	-6	-5	+7	+17	+35	+30	+32	+25	+20	-2	-4	-13	27	123
Summer	+19	-4	-23	-20	+1	+7	+5	-21	-19	-9	-4	+11	+3	-1	+8	+2	-13	0	+2	+23	+24	-4	+2	+13	+2	27	111

Winter: January, February, November, December
Equinox: March, April, September, October
Summer: May to August

* For explanation of 0a, 1a, 2a days see p. 16, *Observatories' Year Book, 1938.*

† See p. 10, *Observatories' Year Book, 1938.*

	JANUARY		FEBRUARY		MARCH		APRIL		MAY		JUNE	
	Character	Duration of negative potential gradient	Character	Duration of negative potential gradient	Character	Duration of negative potential gradient	Character	Duration of negative potential gradient	Character	Duration of negative potential gradient	Character	Duration of negative potential gradient
		hr.		hr.		hr.		hr.		hr.		hr.
1	1b	0·1	0a	···	1c	1·8	1b	0·3	1b	0·7	1b	2·2
2	(1b)	1·7	1b	1·3	(1a)	0·4	1a	0·2	1a	0·1	1b	2·1
3	(1a)	-	1a	0·1	1c	0·8	1b	0·1	0a	···	0a	···
4	(2c)	-	(0a)	···	(1b)	-	1b	0·5	(0a)	···	2b	3·4
5	1a	0·2	0a	···	(1b)	0·3	2b	8·4	(0a)	···	0a	···
6	1a	0·1	1a	0·3	1b	2·1	1a	2·3	0a	···	2b	3·9
7	0a	···	1c	2·4	1b	0·2	1b	2·9	1b	2·2	1a	2·8
8	1a	0·1	1c	1·0	1a	0·4	1a	0·3	0a	···	1a	0·1
9	(1a)	-	0a	···	0a	···	0a	···	(1b)	-	1a	1·1
10	(1b)	-	0a	···	0a	···	2b	9·2	(0a)	···	1a	1·2
11	(1a)	-	1b	0·5	(0a)	···	1a	0·4	0a	···	(0a)	···
12	(1b)	-	(1a)	0·1	1b	0·3	2b	3·6	(1b)	-	(1a)	-
13	(1c)	-	(1a)	-	1b	0·1	1a	0·8	(1b)	-	1a	1·5
14	(1a)	-	0a	···	1b	0·2	1b	1·7	(0a)	···	1b	1·5
15	(1b)	-	1b	0·1	1b	0·9	2b	4·2	0a	···	2b	5·5
16	(1a)	-	1a	0·2	1a	2·6	1a	2·5	0a	···	1a	0·6
17	1c	-	1b	0·2	(1a)	0·2	1b	2·8	0a	···	0a	···
18	1a	0·7	1b	0·3	0a	···	1a	0·3	0a	···	1b	1·3
19	(1a)	-	1b	0·6	1a	0·1	2b	5·6	(0a)	···	2b	3·6
20	0a	···	1b	1·3	1b	0·3	2b	7·4	0a	···	1a	1·2
21	(1a)	-	0a	···	2b	3·4	1b	2·8	0a	···	1b	0·4
22	(1a)	-	1b	2·9	1b	1·9	1a	0·2	1a	2·9	0a	···
23	(1b)	-	1c	1·2	(1b)	0·3	2b	3·4	2a	6·2	0a	···
24	(1a)	-	1c	1·0	2b	7·3	1b	3·0	0a	···	1b	0·6
25	1b	0·8	1b	1·0	1b	0·1	(1b)	-	(0a)	···	2c	11·6
26	1a	-	1b	0·4	2b	5·0	2b	6·5	(0a)	···	1a	0·9
27	(2b)	-	(1b)	1·3	(1b)	1·4	2b	7·6	0a	···	(1a)	-
28	1a	-	1c	2·8	2b	7·3	1b	0·9	0a	···	(1a)	-
29	1b	0·3			1b	1·3	1b	1·7	0a	···	(2c)	-
30	1c	1·3			1a	0·2	1b	1·3	0a	···	(0a)	···
31	1b	0·2			1a	0·1			1a	2·1		
Total	31	5·5	21	19·0	31	39·0	38	80·9	10	14·2	29	45·5
No. of days used	31	12	28	27	31	30	30	29	31	28	30	26
Mean	1·00	0·5	0·75	0·7	1·00	1·3	1·27	2·8	0·32	0·5	0·97	1·8

	JULY		AUGUST		SEPTEMBER		OCTOBER		NOVEMBER		DECEMBER	
	Character	Duration of negative potential gradient	Character	Duration of negative potential gradient	Character	Duration of negative potential gradient	Character	Duration of negative potential gradient	Character	Duration of negative potential gradient	Character	Duration of negative potential gradient
		hr.		hr.		hr.		hr.		hr.		hr.
1	(0a)	···	0a	···	1a	1·5	2b	3·2	2c	5·6	1c	3·7
2	0a	···	0a	···	1a	1·2	2b	7·9	1b	1·9	(2c)	-
3	1a	0·1	0a	···	2b	6·4	1b	0·9	2b	3·4	1a	2·1
4	0a	···	1a	2·9	0a	···	2b	4·3	2a	4·3	1a	1·9
5	2b	5·1	1a	0·6	1a	1·3	2c	5·1	1a	1·5	1b	1·5
6	2a	5·6	0a	···	1a	0·9	1b	0·4	1b	1·0	2b	4·7
7	1a	0·7	0a	···	1b	2·9	1b	3·8	2a	3·6	2b	3·9
8	0a	···	0a	···	2b	3·2	2c	10·2	1a	2·8	1b	0·8
9	2b	5·0	0a	···	1b	1·3	2b	15·5	(1a)	-	0a	···
10	1a	0·6	0a	···	1a	0·1	2c	12·5	1b	1·0	1a	0·7
11	2b	4·6	0a	···	1b	2·3	2c	16·5	1a	0·1	2a	5·9
12	0a	···	0a	···	(1a)	-	2b	11·3	1a	0·1	1a	0·1
13	1a	0·7	0a	···	2b	5·8	2b	17·1	1c	1·0	(1a)	-
14	0a	···	(0a)	···	1b	0·3	2b	18·5	1c	0·8	1a	0·8
15	0a	···	0a	···	2b	3·8	2b	15·5	1b	0·2	2a	4·0
16	0a	···	0a	···	2b	5·6	1b	2·9	(1b)	-	2a	16·0
17	0a	···	0a	···	1b	0·8	1a	1·7	1c	0·2	1a	0·2
18	1a	0·3	(0a)	···	(1a)	-	1a	1·5	1c	0·8	1a	0·5
19	1a	1·9	0a	···	1a	1·2	1a	0·1	1a	0·2	1a	0·3
20	1a	2·4	1a	0·4	1b	2·0	(1a)	-	2b	3·7	1b	1·4
21	1a	1·7	2a	5·4	1a	0·6	2a	4·4	1b	1·9	2a	7·0
22	1a	0·4	0a	···	2b	5·4	0a	···	(1a)	-	1a	2·0
23	1b	0·7	0a	···	1b	1·4	1a	0·5	1c	8·0	2a	3·8
24	1a	0·1	(0a)	···	(1a)	-	0a	···	2b	10·0	2a	3·4
25	1a	0·2	0a	···	2b	4·7	0a	···	1c	0·4	1c	0·7
26	0a	···	0a	···	(1c)	-	1a	0·7	1c	0·7	2a	8·0
27	0a	···	1a	0·1	(1c)	-	2b	7·3	1b	0·6	2a	3·2
28	1b	2·4	0a	···	2c	6·2	2b	4·2	1b	1·7	1a	0·6
29	0a	···	0a	···	2c	5·9	2b	13·6	0a	···	0a	···
30	0a	···	0a	···	1b	0·7	1b	0·3	1c	2·1	1a	0·2
31	0a	···	1a	0·1			(1a)	-			1b	0·8
Total	21	32·5	7	9·5	38	65·5	44	180·0	35	57·6	40	78·2
No. of days used	31	31	31	31	30	25	31	29	30	27	31	29
Mean	0·68	1·0	0·23	0·3	1·27	2·6	1·42	6·2	1·17	2·1	1·29	2·7

Annual values: Character 0 1 2 — No. of days used 89 207 69

Mean character figure 0·95 (365 days)

Duration: Total 627·4 hr. — No. of days 324 — Mean 1·94 hr.

TERRESTRIAL MAGNETIC FORCE: HORIZONTAL COMPONENT

Mean values for periods of sixty minutes ending at exact hours, G.M.T.

9 LERWICK (H) — 14,000γ (0·14 C.G.S. unit) + — JANUARY 1947

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1	374	373	374	382	383	382	381	380	375	373	354	348	355	359	356	358	361	369	371	372	373	370	367	371	369
2	369	368	368	370	372	374	376	376	366	358	359	354	354	363	366	359	356	366	362	368	366	368	370	370	366
3	369	368	369	371	372	367	362	370	367	362	351	351	352	351	354	361	368	370	373	362	376	378	372	355	365
4 d	353	351	353	357	354	355	356	355	350	343	339	353	334	354	376	383	365	363	373	365	348	343	345	354	355
5 d	348	357	352	357	358	345	370	375	368	346	340	344	344	354	363	369	361	358	385	380	350	345	349	343	357
6	297	277	340	344	333	343	351	344	337	333	333	334	351	361	362	367	354	350	353	353	341	333	347	353	341
7	357	357	354	351	357	361	362	369	360	343	337	334	344	349	358	362	356	363	362	367	365	360	362	362	356
8	357	361	363	360	367	365	365	371	360	353	354	351	353	357	358	362	365	367	366	367	368	366	366	368	362
9 q	366	368	369	369	371	372	372	373	372	361	356	353	352	357	359	360	364	366	369	370	368	368	369	369	365
10	373	372	371	371	372	373	374	372	368	360	356	356	358	362	365	369	372	375	376	376	376	376	372	372	369
11 q	370	371	372	375	376	378	378	377	375	369	365	361	358	365	368	371	374	376	378	379	378	376	373	374	372
12 q	374	375	375	376	376	378	378	376	372	368	367	367	370	373	374	376	379	380	383	383	383	380	378	376	*376*
13 q	376	376	376	375	376	380	380	378	376	368	362	360	362	369	375	376	377	380	380	380	380	377	369	368	374
14	368	374	372	372	372	375	376	376	371	362	357	356	362	371	369	369	365	370	376	376	379	378	377	376	371
15	374	371	372	372	374	377	377	376	370	354	349	351	356	362	363	364	371	375	380	381	372	365	349	347	367
16 d	344	348	344	305	243	351	374	380	383	364	349	353	354	352	363	365	417	534	482	327	286	385	378	370	365
17	336	362	329	343	344	340	340	344	348	340	324	335	339	343	345	349	351	359	360	357	362	364	350	351	346
18	350	350	354	354	354	356	358	358	351	336	342	338	337	345	351	358	361	358	356	354	354	354	354	350	351
19	356	351	346	354	358	366	368	361	358	348	337	328	335	336	339	344	354	361	364	365	368	361	356	358	353
20	356	358	358	358	362	368	374	372	367	359	351	348	351	357	355	359	362	371	365	359	360	367	370	370	362
21	363	377	363	363	360	370	371	368	366	361	357	352	353	357	357	356	362	366	373	376	371	374	373	370	365
22	364	370	374	374	374	374	377	377	371	366	363	360	360	362	363	370	374	378	371	370	374	367	375	373	370
23	369	367	365	366	367	373	374	373	369	360	353	352	355	362	364	366	365	367	369	366	358	365	365	369	365
24	369	369	369	370	371	373	373	324	338	341	334	328	328	337	342	362	365	361	362	355	360	362	358	365	355
25 d	355	369	371	378	325	295	266	219	226	266	277	340	427	461	485	532	434	452	456	318	337	318	320	260	354
26 d	304	313	322	284	314	272	286	325	329	301	296	305	317	333	339	371	395	382	381	364	348	339	346	354	*330*
27	346	338	328	330	325	325	350	349	342	326	323	319	335	348	337	358	358	371	356	371	400	361	361	351	346
28	332	333	316	352	360	357	354	347	344	347	338	331	332	342	344	355	356	362	362	365	369	352	349	355	348
29	358	358	357	351	361	362	368	364	359	355	336	327	329	340	353	345	363	360	363	370	371	367	369	368	356
30	369	362	360	360	360	363	363	362	360	360	357	348	340	343	350	352	358	362	365	367	367	371	366	354	359
31	348	351	353	348	359	367	368	367	358	346	339	336	334	338	349	354	358	361	365	367	370	369	358	363	355
Mean	356	358	358	358	357	359	362	360	357	349	*344*	344	349	357	361	368	368	375	*375*	365	364	363	362	359	359

MAGNETIC DECLINATION (WEST)

Mean values for periods of sixty minutes ending at exact hours, G.M.T.

10 LERWICK (D) — 11° + — JANUARY 1947

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′
1	13·1	13·4	14·4	12·5	11·5	11·9	12·5	12·4	12·4	12·0	14·6	16·9	18·3	20·2	20·2	17·9	17·1	14·4	13·9	13·3	12·6	11·7	11·5	11·5	*14·2*
2	12·3	13·0	12·7	12·5	13·0	12·4	11·7	11·7	11·2	12·1	12·7	14·1	14·8	17·8	16·9	18·7	16·2	5·5	14·1	13·2	11·8	11·6	11·5	12·5	13·1
3	13·2	12·7	12·6	12·7	12·5	12·4	14·3	14·3	11·7	11·7	11·7	15·2	16·6	18·1	19·6	20·6	11·1	21·3	20·4	13·5	13·6	8·9	-1·4	11·1	13·7
4 d	11·2	9·5	13·1	11·5	13·3	12·4	11·4	11·2	10·6	11·5	12·8	17·5	18·9	17·6	23·3	23·8	24·0	15·3	14·2	6·4	2·8	7·3	8·1	8·6	13·2
5 d	12·8	7·7	8·6	9·7	9·7	14·3	9·8	7·4	9·3	13·1	14·4	14·8	15·6	16·7	17·3	20·0	3·4	20·8	13·6	12·9	10·7	7·7	7·5	7·0	11·9
6	3·1	12·9	9·3	6·8	12·0	14·8	16·0	13·1	14·3	15·8	15·3	13·7	14·6	16·7	13·0	12·4	12·9	13·2	12·8	5·7	7·0	8·3	6·6	10·2	11·7
7	10·9	10·3	13·7	13·9	13·1	10·4	10·9	11·5	11·8	13·2	13·8	16·0	15·7	16·5	16·2	14·8	13·5	15·0	14·2	13·7	13·1	11·2	6·8	9·5	12·9
8	10·2	8·7	7·0	8·5	9·4	12·3	11·7	10·5	10·5	14·7	14·8	14·7	15·7	15·5	14·7	14·4	13·8	14·5	13·2	12·7	12·0	11·9	11·8	11·3	12·3
9 q	11·2	11·4	11·9	12·4	13·1	12·3	12·4	12·0	11·3	10·9	10·7	12·5	14·1	15·1	14·3	13·7	13·8	13·8	13·2	12·8	11·9	11·8	11·8	11·5	12·5
10 q	12·4	11·9	11·9	12·5	12·6	12·2	11·5	11·0	10·5	10·9	11·9	13·3	13·8	14·0	13·7	13·9	13·4	13·7	13·3	13·0	12·3	12·2	12·0	11·7	12·5
11 q	11·9	12·3	12·9	12·8	12·1	11·7	11·1	10·5	10·2	10·7	11·5	12·5	13·3	14·3	13·9	14·3	14·0	13·8	13·2	12·4	11·9	11·5	11·6	11·6	12·3
12 q	11·8	12·1	12·2	12·6	12·5	12·0	11·5	11·3	11·2	11·5	12·0	13·2	13·5	14·1	13·7	13·9	13·8	14·0	13·4	12·9	12·4	12·0	11·9	11·9	12·6
13 q	12·1	11·9	12·0	11·9	11·5	11·3	11·0	11·1	11·2	11·8	13·0	14·2	15·9	15·8	15·9	14·9	14·4	14·4	13·9	13·3	13·3	12·8	11·3	11·1	12·9
14	11·5	10·5	9·7	10·1	11·0	11·3	11·0	11·1	10·9	11·0	12·0	14·3	16·7	17·3	16·2	17·6	18·1	16·4	15·9	14·4	13·0	12·3	12·1	11·5	13·2
15	11·2	11·8	12·8	11·6	11·7	12·8	12·1	10·9	10·5	10·5	12·1	14·6	16·2	15·8	14·0	13·3	13·9	14·7	14·6	14·1	12·7	8·1	6·2	6·1	12·2
16 d	5·3	7·3	9·8	19·5	-0·1	0·5	5·3	8·7	8·7	9·9	11·1	13·1	15·2	15·2	15·9	15·7	24·1	19·7	16·0	5·1	4·8	7·4	12·5	10·0	10·9
17	9·3	5·4	8·5	9·6	10·5	9·0	10·1	10·2	10·4	10·2	10·9	12·9	14·4	13·3	13·3	12·6	12·6	13·3	14·8	13·2	12·6	14·7	9·0	7·0	11·2
18	8·5	8·0	9·3	10·2	10·5	10·4	10·2	9·7	9·5	11·2	11·5	12·6	14·3	16·4	15·8	12·8	15·8	15·2	9·7	13·5	11·2	10·5	10·3	9·9	11·5
19	5·5	6·9	8·0	12·7	12·0	11·4	11·4	10·3	9·8	9·5	11·3	13·2	13·9	15·7	15·3	14·6	14·5	13·9	13·8	13·2	13·0	11·2	11·6	5·7	11·6
20	6·4	8·7	10·2	10·0	10·2	10·1	11·2	11·1	10·8	10·9	11·9	12·7	13·7	14·4	13·3	*	13·9	*	*	14·6	12·4	11·5	12·0	11·8	*
21	10·4	8·4	6·7	8·2	9·8	11·9	11·0	10·6	10·4	11·1	12·2	12·7	13·4	14·2	13·0	13·0	14·1	14·1	13·9	13·3	10·9	12·2	12·4	11·9	11·7
22	12·9	11·9	12·2	12·1	11·8	11·5	10·8	10·3	10·2	11·4	12·0	13·3	14·8	15·6	15·5	16·2	17·2	19·0	16·7	15·3	11·5	8·6	11·6	10·0	13·0
23	8·8	7·7	7·8	10·9	9·5	9·9	10·2	10·1	10·0	9·8	10·1	11·8	13·2	13·8	13·9	14·8	14·3	15·0	12·4	13·3	13·4	10·9	11·1	12·4	11·5
24	12·6	12·4	12·4	12·2	11·8	11·7	10·9	9·3	12·0	11·1	12·1	11·9	13·7	12·4	7·5	9·1	10·7	11·2	12·9	6·5	10·5	7·2	8·0	11·0	10·9
25 d	12·4	10·9	10·3	18·1	16·4	22·9	17·1	16·4	15·5	8·0	7·1	8·1	15·3	19·5	20·0	20·9	18·1	17·5	4·8	18·1	13·2	12·6	5·5	0·8	13·7
26 d	2·1	2·2	2·9	-5·1	2·0	2·6	10·4	12·4	9·1	9·0	13·6	16·2	16·9	18·7	17·0	19·4	9·1	19·7	13·7	6·2	6·5	10·5	9·2	10·7	*9·8*
27	8·1	10·6	13·5	13·8	15·3	12·1	10·9	9·9	9·1	10·1	11·4	13·7	16·7	16·6	13·2	15·3	17·1	18·5	16·9	11·0	-2·8	8·3	8·1	6·0	11·8
28	14·9	6·3	11·5	8·9	8·6	10·3	10·3	10·3	9·6	10·3	10·3	11·1	12·9	16·8	14·8	13·7	13·3	13·6	12·9	12·5	9·0	5·4	4·3	7·7	10·8
29	9·5	9·9	9·2	9·5	4·8	6·4	8·2	9·8	9·3	11·9	11·6	13·8	15·8	17·1	19·3	17·2	15·7	13·9	12·4	12·4	12·4	11·5	11·2	11·0	11·8
30	9·0	8·0	6·6	7·9	9·1	9·5	9·0	9·4	9·4	11·9	13·8	15·4	16·2	17·0	16·5	15·0	13·4	13·2	13·1	12·7	12·2	11·5	2·6	-0·4	10·9
31	4·9	6·9	8·3	10·1	10·1	10·1	10·5	10·4	10·2	10·9	11·6	12·4	12·9	13·8	14·7	14·0	13·8	14·0	13·7	12·5	12·4	11·5	8·6	5·3	11·0
Mean†	10·1	9·8	10·4	11·0	10·7	11·2	11·2	10·9	10·7	11·3	12·1	13·7	15·1	*16·1*	15·6	15·6	14·6	15·1	13·7	12·1	10·7	10·4	9·2	*9·2*	12·1

* Not recorded. † Omitting January 20.

TERRESTRIAL MAGNETIC FORCE: VERTICAL COMPONENT

Mean values for periods of sixty minutes ending at exact hours, G.M.T.

11 LERWICK (V) — 46,000γ (0·46 C.G.S. unit) + — JANUARY 1947

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1	981	978	975	971	971	973	978	978	983	981	983	978	977	978	984	996	992	987	987	984	985	988	990	984	982
2	982	979	978	978	978	978	979	980	984	984	986	986	983	983	986	997	1034	1071	1011	994	990	986	984	982	991
3	983	982	980	978	976	977	978	971	977	982	985	983	981	984	989	997	1021	1021	1077	1087	1072	1039	1001	979	1000
4 d	984	979	977	978	984	987	989	990	994	996	996	996	998	997	1002	1056	1064	1040	1052	1059	1007	957	959	983	1001
5 d	977	978	992	988	984	973	953	965	971	991	991	993	996	1002	1004	1003	1035	1027	1058	1085	983	1009	1013	990	998
6	954	900	926	959	953	952	961	982	996	1002	1004	1008	1034	1037	1041	1027	1017	1021	1022	1015	989	963	964	983	988
7	985	990	978	948	965	978	984	978	983	990	993	996	997	997	996	999	1005	999	996	990	990	993	991	988	988
8	989	984	985	984	978	979	979	978	981	971	973	977	978	983	989	991	990	990	989	984	984	981	979	980	982
9 q	982	983	983	983	982	982	981	979	979	983	983	979	979	983	986	990	990	989	988	984	984	982	978	977	983
10 q	973	974	977	980	980	981	982	982	981	979	978	976	976	977	978	979	980	981	982	983	981	979	978	978	979
11 q	977	977	977	977	978	978	978	978	978	976	978	977	976	975	977	978	978	979	979	981	981	981	979	978	978
12 q	976	973	972	972	972	973	974	976	976	973	972	971	968	971	971	971	972	973	976	976	976	976	976	973	*973*
13 q	972	971	971	971	971	971	971	972	973	973	978	977	971	973	971	971	972	977	982	984	984	987	991	989	976
14	984	976	976	977	977	977	977	978	983	984	990	986	978	977	978	978	981	984	984	984	983	983	981	979	981
15	979	978	977	978	976	974	978	978	984	990	990	989	984	983	984	983	979	978	979	984	1002	1009	1002	984	984
16 d	976	961	959	914	728	877	931	956	965	984	990	989	985	990	991	1005	1009	1152	1105	998	1001	1012	1053	1046	982
17	1036	959	983	1002	1003	999	997	1001	1002	1003	1014	1009	1004	1004	1002	999	996	994	999	1004	1009	985	998	1009	1001
18	1008	996	995	996	996	994	993	994	996	1002	1007	1009	1007	1003	1009	1020	1009	1014	1026	1015	1017	1009	996	985	1004
19	962	969	984	990	996	991	990	991	992	997	1002	1004	1001	997	998	1001	996	991	990	990	991	1002	1002	970	991
20	990	996	996	1001	997	994	990	990	991	995	996	996	996	993	996	995	994	995	1011	1022	1021	1008	1000	996	998
21	1001	992	984	984	985	984	984	985	989	989	990	994	990	989	992	994	991	990	988	989	992	987	987	990	989
22	989	989	990	990	989	988	984	985	987	984	989	990	990	991	991	990	996	1020	1022	1021	1014	1009	995	994	995
23	997	997	999	997	997	996	995	990	989	989	990	984	983	983	984	985	990	991	995	995	996	992	990	983	991
24	982	983	984	986	986	986	984	1001	1009	1002	1001	999	1001	999	995	1007	1003	1002	1008	1033	1025	1009	983	978	998
25 d	945	972	979	954	861	887	879	896	912	960	1010	1047	1048	1040	1053	1096	1131	1102	1067	1035	1073	1054	1016	977	1000
26 d	1002	1025	1026	984	911	930	928	962	995	1009	1010	1015	1024	1034	1040	1056	1078	1052	1061	1062	1030	1017	1003	997	*1011*
27	996	991	990	983	972	979	997	1003	1008	1010	1009	1007	1002	1004	1015	1015	1012	1005	1021	1043	1019	1008	1004	1007	1004
28	943	959	967	967	984	992	996	997	1003	1000	1003	1003	1002	999	1003	1002	1003	1002	1003	1000	999	996	984	990	991
29	997	998	998	987	959	972	979	983	991	991	999	1004	1004	1005	1016	1022	1021	1013	1009	998	997	998	997	995	997
30	991	984	982	987	990	989	988	991	990	984	984	986	987	984	979	984	987	991	991	991	991	992	1004	979	988
31	984	978	980	969	954	967	979	987	992	997	997	992	986	983	980	985	986	989	990	990	990	991	992	967	983
Mean	983	979	981	978	*966*	973	975	980	985	989	993	994	993	993	996	1002	1007	1010	*1011*	1008	1002	996	993	987	991

DAILY EXTREMES OF TERRESTRIAL MAGNETIC ELEMENTS, MAGNETIC CHARACTER FIGURES AND TEMPERATURE IN MAGNET HOUSE

12 LERWICK — JANUARY 1947

	TERRESTRIAL MAGNETIC ELEMENTS												3-hr. range indices K	Sum of K indices	Magnetic character of day (0-2)	Temperature in magnet house 200 +
	Horizontal force					Declination			Vertical force							
	Maximum 14,000γ +		Minimum 14,000γ +		Range	Maximum 11° +		Minimum 11° +		Range	Maximum 46,000γ +		Minimum 46,000γ +		Range				
	h. m.	γ	γ	h. m.	γ	h. m.	′	′	h. m.	′	h. m.	γ	γ	h. m.	γ					°A.
11	4 43	385	344	11 32	41	13 00	21·7	10·8	23 03	10·9	15 31	1001	969	03 25	32	1,1,0,2,2,2,0,1	9	0	82·5
2	17 6	408	338	15 57	70	15 50	21·8	−10·1	17 20	31·9	17 10	1124	977	05 20	147	0,0,1,1,2,5,3,1	13	1	82·4
3	22 21	393	335	22 50	58	18 20	28·0	−14·2	22 18	42·2	18 33	1108	965	23 08	143	1,1,2,2,2,3,3,4	18	1	82·2
4 d	15 49	398	325	21 29	73	15 01	29·4	−7·5	19 41	36·9	19 37	1084	933	21 47	151	2,2,1,3,3,3,4,3	21	1	82·6
5 d	18 13	467	294	20 38	173	18 45	30·5	−7·5	16 27	38·0	18 12	1123	931	20 33	192	3,3,3,2,3,5,5,3	27	1	83·0
6	15 0	386	209	1 0	177	11 59	19·3	−3·0	00 14	22·3	14 56	1047	884	01 35	163	5,3,3,2,3,3,3,3	25	1	83·2
7	22 30	376	329	11 9	47	12 03	18·2	0·8	22 28	17·4	16 25	1009	941	03 40	68	2,3,2,1,2,1,1,3	15	1	81·9
8	7 21	376	347	9 18	29	12 59	16·7	5·9	02 47	10·8	16 08	996	969	10 00	27	2,2,2,1,1,1,0,0	9	0	81·1
9 q	7 18	376	351	12 0	25	13 35	15·3	10·3	10 07	5·0	16 00	990	974	24 00	16	0,1,1,1,1,1,0,1	6	0	80·2
10 q	20 55	377	354	11 22	23	13 32	14·1	10·5	09 24	3·6	19 30	983	969	00 48	14	1,1,1,0,0,1,0,1	5	0	80·2
11 q	19 55	380	358	12 10	22	13 30	15·1	10·1	09 21	5·0	21 40	983	972	13 10	*11*	0,0,0,0,1,1,0,0	2	0	80·6
12 q	18 10	384	365	11 40	*19*	13 32	14·3	11·0	08 13	*3·3*	20 00	977	966	12 30	11	1,1,1,1,1,0,0,0	5	0	78·0
13 q	19 0	382	358	11 35	24	14 15	16·4	9·6	22 39	6·8	22 42	996	970	12 35	26	0,0,0,1,1,1,0,1	4	0	77·0
14	18 20	380	354	10 56	26	16 27	18·9	9·5	02 22	9·4	10 30	990	972	01 33	18	1,1,0,1,1,1,1,0	6	0	79·0
15	19 30	387	342	23 58	45	12 56	17·0	5·0	24 00	12·0	21 35	1016	973	05 28	43	1,1,1,1,1,2,2,2	11	0	79·8
16 d	18 42	730	*184*	4 17	546	18 45	34·4	−12·2	19 04	46·6	17 40	*1178*	*760*	04 30	*418*	2,5,3,2,2,6,6,4	30	2	81·8
17	1 10	409	311	0 55	98	21 41	19·5	−0·6	01 04	20·1	00 18	1045	940	02 00	105	4,2,2,2,2,1,3,3	19	1	82·0
18	15 28	369	333	9 12	36	13 38	18·1	3·9	01 50	14·2	18 00	1034	968	23 50	66	3,1,1,1,2,3,3,3	17	1	82·0
19	23 32	377	320	11 43	57	23 04	20·9	−3·2	23 24	24·1	22 05	1010	956	01 58	54	2,2,2,2,1,1,1,4	15	1	81·4
20	17 32	377	350	11 58	27	19 45	17·1	12·6	24 00	4·5	19 16	1027	973	00 00	54	2,1,0,1,1,1,2,1	9	0	81·3
21	1 36	401	351	11 10	50	13 24	14·9	3·5	01 34	11·4	01 17	1004	978	05 50	26	3,2,1,1,1,1,2,0	11	0	81·2
22	7 11	387	350	21 29	37	17 32	22·0	5·8	20 55	16·2	17 50	1041	983	06 25	58	2,1,1,1,1,2,3,2	13	0	82·0
23	5 55	376	350	10 36	26	17 58	15·9	5·1	01 35	10·8	20 35	1000	979	23 30	21	2,1,0,1,1,1,3,1	10	0	82·0
24	23 50	383	304	7 53	79	24 00	18·1	1·0	19 21	17·1	19 20	1040	948	24 00	92	0,1,4,2,2,2,3,3	17	1	81·3
25 d	15 5	*784*	192	7 59	*592*	15 21	*36·9*	−13·1	18 40	*50·0*	16 42	1155	810	06 42	345	3,5,5,5,6,6,6,5	41	2	81·0
26 d	16 30	423	188	3 34	235	17 39	25·3	*−18·4*	04 11	43·7	16 25	1112	866	04 59	246	3,5,4,2,3,4,4,2	27	1	81·0
27	20 21	432	288	2 30	144	18 00	20·2	−15·7	20 22	35·9	19 55	1073	960	04 45	113	3,3,2,2,3,2,5,3	23	1	81·3
28	20 43	382	288	2 29	94	00 14	20·5	0·9	20 43	19·6	21 05	1004	909	00 48	95	4,2,2,1,2,1,3,2	17	1	81·7
29	6 38	373	323	11 57	50	14 33	22·8	1·3	04 40	21·5	15 02	1027	953	04 40	74	1,3,1,2,2,2,1,0	12	0	81·2
30	22 51	392	331	12 50	61	13 54	17·9	−6·3	23 08	24·2	22 36	1017	975	23 09	42	2,1,1,1,1,1,0,3	10	0	80·9
31	21 2	375	331	12 48	44	14 16	15·0	−2·3	23 50	17·3	09 50	998	949	04 35	49	2,2,1,1,1,0,1.3	11	0	80·2
Mean	- -	414	316	- -	98	- -	20·5	0·1		20·4		1038	944		94	-	-	0·55	81·2

q denotes an international quiet day and d an international disturbed day.

TERRESTRIAL MAGNETIC FORCE: HORIZONTAL COMPONENT

Mean values for periods of sixty minutes ending at exact hours, G.M.T.

13 LERWICK (H) — 14,000γ (0·14 C.G.S. unit) + — FEBRUARY 1947

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1	367	363	357	358	371	374	375	372	357	353	349	345	339	344	353	359	363	365	367	367	363	361	374	371	361
2	370	370	370	370	371	375	374	368	363	351	345	341	341	349	358	363	367	375	374	377	374	364	367	364	364
3	366	363	365	365	366	369	372	372	367	360	348	338	336	340	345	364	374	377	371	378	376	375	377	375	364
4	371	365	363	362	367	370	380	385	371	347	342	338	326	333	346	356	360	363	363	367	369	360	362	369	360
5	367	366	364	367	369	369	369	368	363	352	343	342	345	353	360	363	363	362	367	370	371	372	370	368	363
6	367	371	371	374	376	369	384	377	360	349	342	338	333	341	346	356	367	367	365	363	367	371	374	374	363
7	371	370	371	373	375	378	378	375	374	353	349	340	342	352	342	358	368	378	364	363	363	367	367	374	364
8 d	375	377	375	371	367	370	374	367	344	340	335	317	314	342	374	374	404	436	467	357	309	186	323	302	354
9 d	317	316	244	298	319	353	356	349	352	331	327	324	338	335	340	348	367	353	363	378	385	353	356	299	337
10	339	371	365	360	360	360	367	374	374	357	335	318	317	342	369	352	349	363	353	363	360	362	367	365	356
11	362	362	361	363	366	364	365	364	357	338	327	319	321	327	344	353	359	367	368	371	377	378	367	370	356
12	374	371	371	371	375	378	377	375	367	347	338	332	334	338	349	359	354	359	364	369	371	371	372	368	362
13	367	373	371	374	377	375	378	377	367	352	340	338	343	342	348	357	366	367	371	372	377	376	377	377	365
14 q	375	377	377	378	378	381	379	377	367	348	340	335	338	345	355	363	367	371	371	377	378	377	377	374	367
15 q	377	378	378	378	379	378	381	378	371	353	344	332	337	345	353	356	361	367	374	377	374	376	377	374	367
16 d	374	374	375	396	403	396	396	396	377	342	316	299	340	447	562	493	580	433	378	352	385	338	273	153	*382*
17 d	70	199	114	109	226	286	312	312	294	283	291	302	331	320	346	365	399	393	364	348	352	349	350	345	*294*
18	345	321	320	326	342	342	341	337	327	321	323	325	331	338	352	367	367	370	377	383	365	366	358	351	346
19 d	354	356	349	349	349	349	345	341	345	340	337	327	320	349	385	403	367	389	391	355	352	306	309	258	347
20	317	349	313	284	345	356	354	349	345	335	327	320	324	323	335	345	352	356	360	361	363	364	364	364	342
21 q	364	364	367	368	367	368	367	365	359	338	334	328	329	338	349	356	358	360	365	368	370	371	370	370	358
22 q	370	370	371	372	374	374	374	371	365	349	342	340	342	349	359	366	367	371	375	377	378	377	375	375	366
23 q	374	371	373	374	376	377	374	371	365	349	342	338	337	342	350	357	363	367	373	374	377	375	374	373	364
24	370	371	374	380	383	386	388	385	378	360	349	344	331	337	358	357	368	385	379	363	368	376	382	381	369
25	377	377	375	376	379	377	378	381	371	345	335	331	333	324	331	349	360	367	372	373	375	372	363	360	362
26	344	342	334	349	356	374	378	368	353	345	335	322	319	335	342	359	360	363	366	368	369	370	370	361	353
27	353	359	361	354	355	365	370	370	364	349	343	336	335	339	345	352	363	370	373	374	379	376	374	373	359
28	371	369	367	370	372	374	374	375	371	354	346	341	342	355	365	370	366	367	373	378	378	370	368	360	366
Mean	352	358	350	353	362	367	370	368	360	344	337	*330*	333	344	359	365	373	*374*	373	369	369	359	362	352	358

MAGNETIC DECLINATION (WEST)

Mean values for periods of sixty minutes ending at exact hours, G.M.T.

14 LERWICK (D) — 11° + — FEBRUARY 1947

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′
1	-0·4	6·4	10·0	8·3	9·8	12·1	11·4	11·1	10·1	10·0	11·0	12·8	14·7	15·7	15·3	14·6	13·8	13·3	13·1	13·1	12·4	11·2	10·8	10·5	11·3
2	12·7	12·9	12·4	11·9	11·8	11·8	11·1	10·2	9·7	10·1	11·8	13·8	14·5	15·9	16·0	15·5	14·4	14·3	14·5	14·1	14·8	13·8	13·3	11·8	13·1
3	11·5	10·4	10·5	10·5	10·2	10·2	9·5	9·8	12·1	12·5	13·3	13·8	14·5	15·3	15·4	16·7	16·9	17·6	17·9	14·7	13·3	11·9	11·9	12·0	13·0
4	11·5	5·7	4·7	5·2	6·2	9·5	11·5	11·0	9·5	11·9	13·7	15·3	17·8	15·7	16·7	14·8	13·0	12·7	12·8	12·4	11·8	9·5	9·8	11·9	11·4
5	8·8	11·3	11·3	10·9	10·7	10·7	10·5	10·1	8·8	9·1	11·5	14·6	16·6	16·7	14·8	14·4	13·3	12·8	13·0	13·0	11·9	11·7	10·0	9·2	11·9
6	11·4	11·5	11·5	10·8	10·4	11·7	14·6	15·1	11·5	7·8	9·1	12·4	16·8	18·7	17·6	17·3	14·8	13·7	8·6	9·9	7·3	7·2	10·7	11·7	12·2
7	11·9	11·9	11·8	11·5	11·2	10·9	10·5	9·9	9·7	11·9	14·6	16·2	20·4	20·9	19·1	15·2	15·2	16·9	16·7	13·0	11·2	9·8	8·6	9·8	*13·3*
8 d	11·3	11·8	10·0	9·0	8·8	9·4	9·6	9·8	14·1	17·8	14·6	16·2	18·1	21·9	26·3	22·7	28·1	17·6	16·2	4·0	5·2	7·2	-10·9	-2·8	12·3
9 d	6·0	4·1	7·3	0·1	10·3	11·4	8·6	8·6	7·6	8·5	11·7	12·0	13·3	14·6	14·5	13·6	12·2	12·9	13·2	14·3	-1·8	-11·2	-3·7	-0·2	7·9
10	3·1	3·3	3·9	8·6	8·4	9·2	9·0	9·0	9·8	9·5	12·5	15·9	18·1	22·4	25·6	19·8	15·5	13·7	13·3	12·5	12·0	10·9	8·0	9·2	11·8
11	8·6	10·6	11·1	11·2	10·8	10·1	9·5	9·1	7·7	7·7	9·1	11·2	13·3	14·9	15·8	15·7	14·7	14·5	14·3	13·6	13·8	10·0	8·2	7·7	11·3
12	11·9	11·6	11·1	11·1	11·0	10·7	10·1	9·8	8·0	7·1	8·4	11·7	14·6	16·3	18·1	16·7	14·6	14·6	13·7	13·0	12·5	12·3	11·4	7·3	12·0
13	10·0	11·6	11·9	11·9	12·4	12·2	10·1	9·8	8·6	8·1	9·6	13·5	17·2	17·2	17·0	15·2	14·3	13·2	13·8	13·7	12·4	12·4	12·0	11·7	12·5
14 q	11·7	11·8	11·9	11·9	11·7	11·4	11·0	10·1	8·3	7·0	9·2	11·8	14·3	16·2	16·8	16·2	14·3	13·9	14·8	14·1	13·6	12·8	11·9	12·0	12·4
15 q	11·8	11·5	11·7	11·4	11·2	11·0	10·0	9·2	7·0	6·2	8·6	11·4	13·3	15·1	15·2	15·2	14·7	14·6	13·8	13·5	12·9	12·4	12·4	12·6	11·9
16 d	12·8	12·8	12·5	13·6	11·9	10·0	9·8	8·1	5·9	5·7	9·4	14·3	17·5	19·3	19·2	17·6	17·8	10·2	15·3	11·6	7·0	1·9	2·1	-2·8	11·0
17 d	-15·1	-22·7	-41·3	-9·9	-3·7	0·7	8·9	4·1	2·0	9·1	10·9	13·8	16·9	18·1	19·5	21·9	18·4	18·5	15·6	13·8	12·0	11·0	11·1	10·9	*6·0*
18	11·2	2·3	2·4	5·6	4·8	7·7	7·3	7·2	5·7	7·7	11·1	14·5	17·5	17·7	17·2	15·8	14·8	15·3	17·6	23·1	13·8	14·6	7·2	8·0	11·3
19 d	8·6	5·7	6·1	5·3	5·7	4·3	4·0	9·0	5·7	5·9	8·9	13·3	17·7	22·5	22·9	23·0	19·6	18·5	12·0	10·9	5·3	0·1	-6·1	-3·3	9·4
20	4·1	7·7	11·0	12·8	9·8	7·4	9·1	8·3	7·3	7·2	9·5	12·0	16·8	16·1	15·9	14·7	13·3	12·6	11·8	10·7	9·8	11·0	10·5	10·9	10·8
21 q	11·5	11·6	11·7	11·1	10·6	9·9	8·9	7·5	6·2	7·2	10·8	14·3	15·1	15·0	14·8	12·9	12·6	12·5	12·4	12·4	12·2	11·8	11·8	11·8	11·5
22 q	11·8	11·7	11·8	11·5	11·3	10·5	9·9	8·9	7·2	7·1	8·8	11·3	13·8	15·4	14·8	13·9	13·3	12·3	12·4	12·5	12·7	8·6	9·4	11·6	11·4
23 q	12·0	11·6	12·0	11·8	11·3	10·9	10·0	8·6	6·8	6·5	8·7	12·1	15·0	15·7	15·3	13·7	13·5	12·9	12·7	12·8	12·8	12·4	11·7	11·0	11·7
24	10·3	10·2	8·0	9·4	9·5	9·8	9·8	8·7	7·1	6·7	8·4	13·5	15·5	16·3	18·1	16·2	14·4	13·2	12·0	12·3	11·5	11·5	11·1	11·3	11·5
25	11·3	11·5	11·0	11·2	10·9	9·9	10·1	9·0	8·8	9·0	12·0	15·1	18·3	19·1	18·4	17·1	14·5	12·0	11·4	11·9	10·8	5·7	5·4	7·9	11·8
26	7·6	-3·3	-10·2	3·7	11·9	9·9	10·0	9·5	7·8	7·5	9·9	13·6	15·6	18·1	17·5	16·7	14·1	13·6	12·9	11·8	11·5	11·0	10·3	5·0	9·8
27	3·9	4·1	5·6	5·8	8·3	6·3	7·8	7·9	7·7	8·1	10·4	14·1	17·0	17·1	15·5	13·5	11·9	11·6	12·4	12·4	12·8	11·9	9·0	8·9	10·2
28	9·5	9·8	8·4	8·1	7·5	7·2	8·7	8·9	7·8	7·3	8·9	13·1	16·7	19·2	18·6	17·1	13·5	11·5	13·3	13·0	11·9	9·4	6·0	5·0	10·9
Mean	8·6	7·8	7·2	8·7	9·5	9·5	9·7	9·2	8·2	8·6	10·6	13·5	16·1	17·4	*17·6*	16·3	15·1	14·0	13·6	12*8*	11·0	9·4	8·0	8·2	11·3

TERRESTRIAL MAGNETIC FORCE: VERTICAL COMPONENT

Mean values for periods of sixty minutes ending at exact hours, G.M.T.

15 LERWICK (V) — 46,000γ (0·46 C.G.S. unit) + — FEBRUARY 1947

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1	948	941	952	953	948	944	950	960	972	980	991	997	997	992	986	985	985	985	985	988	991	991	980	979	974
2	981	984	985	984	981	980	981	985	987	993	992	992	992	991	987	986	986	981	983	984	987	1003	1003	1001	988
3	997	996	993	991	986	985	980	980	980	973	981	990	990	991	992	990	998	1004	1004	996	991	991	986	982	989
4	973	920	916	938	954	961	967	972	976	981	983	985	994	1012	1003	995	993	991	986	985	986	998	993	975	977
5	969	982	986	986	986	985	985	985	986	986	985	985	984	985	986	986	988	991	986	985	983	983	986	987	985
6	986	983	986	986	985	981	966	963	973	980	984	985	988	986	989	998	999	1008	1011	1004	993	984	975	977	986
7	980	983	985	986	985	984	983	982	981	980	979	981	981	986	998	993	991	996	1023	1024	1016	999	985	973	990
8 d	967	961	963	973	979	980	981	984	982	967	978	994	1009	1012	1033	1074	1086	1154	1111	1075	1003	945	938	907	1002
9 d	925	930	900	900	897	916	961	985	991	997	999	994	985	984	986	990	999	1010	997	993	1021	960	946	885	*965*
10	908	974	988	1002	999	997	993	991	988	991	999	997	995	1005	1043	1054	1027	1010	1007	1006	1005	1002	988	985	998
11	984	983	984	986	987	988	990	992	998	1000	1000	995	989	986	987	988	990	990	989	990	989	994	989	988	990
12	983	986	987	987	987	987	987	988	992	996	998	994	987	982	986	987	991	987	988	988	987	988	987	988	988
13	986	982	982	981	981	981	981	982	989	992	993	991	989	993	990	984	987	992	990	989	987	987	986	986	987
14 q	986	986	984	982	982	982	983	984	991	988	988	987	987	984	979	981	985	987	986	984	986	986	986	986	985
15 q	981	982	982	982	981	981	981	983	991	993	992	992	987	986	984	986	984	986	984	986	988	987	987	986	985
16 d	987	986	986	974	965	970	970	974	981	980	1000	1014	1074	1106	1084	1117	1050	1056	1080	1081	1087	1060	1031	1044	*1027*
17 d	1114	943	819	811	884	852	904	952	987	983	994	1008	1027	1037	1049	1057	1081	1076	1051	1036	1025	1025	1024	1018	990
18	991	971	948	948	950	957	970	990	1000	1000	1000	1007	1015	1019	1022	1032	1030	1026	1025	1055	1060	1045	1021	1017	1004
19 d	1018	1000	1006	1005	1001	993	989	975	976	993	998	1000	1000	1015	1035	1069	1080	1062	1093	1051	1020	936	912	874	1004
20	841	942	933	859	912	945	975	989	999	1000	999	995	995	1000	1000	1000	995	996	996	996	995	992	992	990	972
21 q	991	993	993	993	993	994	994	994	994	995	993	994	995	988	985	988	989	989	993	990	989	988	988	988	991
22 q	989	993	994	994	994	994	994	994	994	993	992	988	983	982	981	982	986	988	988	987	986	986	983	980	989
23 q	981	983	986	987	988	988	990	991	990	989	988	987	986	985	987	987	988	988	988	988	987	988	987	982	987
24	982	974	977	986	987	985	985	987	988	988	987	982	986	982	982	988	989	992	1002	1016	1006	991	982	980	988
25	982	983	984	986	983	988	986	984	988	989	988	983	989	1000	1001	1004	1002	1001	1001	1000	995	995	994	977	991
26	908	870	881	911	951	964	977	983	989	987	983	981	981	983	988	996	1002	1001	996	994	992	990	989	993	970
27	994	988	983	984	970	970	982	985	986	989	984	981	981	983	983	984	989	993	989	988	988	988	989	984	985
28	978	977	975	979	983	987	988	989	990	990	986	980	978	978	988	996	1002	1005	995	990	994	1001	987	964	987
Mean	975	971	965	*965*	971	972	978	982	987	988	991	991	994	998	1001	1006	1006	*1009*	1008	1005	1001	992	985	978	988

DAILY EXTREMES OF TERRESTRIAL MAGNETIC ELEMENTS, MAGNETIC CHARACTER FIGURES AND TEMPERATURE IN MAGNET HOUSE

16 LERWICK — FEBRUARY 1947

	TERRESTRIAL MAGNETIC ELEMENTS												3-hr. range indices K	Sum of K indices	Magnetic character of day (0-2)	Temperature in magnet house 200 +
	Horizontal force					Declination			Vertical force							
	Maximum 14,000γ +		Minimum 14,000γ +		Range	Maximum 11° +	Minimum 11° +	Range	Maximum 46,000γ +		Minimum 45,000γ +		Range			
	h. m.	γ	γ	h. m.	γ	h. m.	′	′	h. m.	′	h. m.	γ	γ	h. m.	γ					°A.
1	22 36	384	337	12 50	47	13 17	16·9	−3·7	0 23	20·6	11 53	998	938	1 30	60	3,2,2,1,2,1,1,2	14	1	80·0
2	20 0	381	338	11 39	43	20 34	17·0	9·4	8 37	7·6	21 50	1006	978	5 48	28	1,1,1,1,1,1,2,2	10	0	80·0
3	19 56	387	334	10 58	53	18 0	21·2	8·8	6 27	12·4	17 12	1009	969	9 28	40	1,1,2,2,1,2,2,1	12	0	79·5
4	7 26	389	313	13 0	76	12 47	19·5	1·5	2 43	18·0	13 29	1016	903	1 45	113	3,3,2,2,2,1,1,3	17	1	79·5
5	19 0	378	336	11 5	*42*	13 33	18·8	6·8	0 0	12·0	17 10	991	957	0 0	34	2,0,1,2,2,1,1,1	10	0	79·3
6	6 45	392	328	12 9	64	13 17	19·7	3·3	20 56	16·4	17 59	1017	960	6 45	57	1,2,3,2,2,2,2,2	16	1	79·0
7	17 32	386	331	12 10	55	13 9	23·6	6·8	22 2	16·8	18 53	1034	970	23 54	64	0,0,2,2,2,2,2,2	12	1	79·1
8 d	18 36	598	42	21 36	555	14 20	31·3	−20·7	22 14	52·0	17 50	1181	830	21 43	351	2,1,3,3,3,4,6,7	29	2	79·0
9 d	20 48	407	211	2 37	196	20 4	16·7	−25·2	20 53	41·9	20 34	1063	857	2 52	206	4,4,3,2,2,2,5,4	26	1	78·5
10	1 32	389	304	12 11	85	14 36	29·8	−0·5	0 35	30·3	15 1	1065	869	0 0	196	4,1,2,3,3,3,1,2	19	1	78·2
11	21 43	389	317	11 55	72	14 16	16·9	3·9	21 43	13·0	21 40	1005	982	22 37	23	2,1,1,2,2,2,1,3	14	0	78·0
12	23 20	381	329	11 30	52	14 43	19·3	6·1	23 43	13·2	11 5	999	981	13 23	18	1,0,1,2,2,2,1,2	11	0	78·6
13	6 59	384	335	11 35	49	14 6	19·3	6·9	9 21	12·4	10 20	995	978	5 35	17	1,1,2,2,2,1,1,0	10	0	78·8
14 q	20 0	383	334	11 51	49	14 15	17·1	5·5	9 39	11·6	8 32	992	977	14 35	15	0,0,1,2,2,1,1,1	8	0	78·9
15 q	5 59	382	329	11 31	53	14 10	16·7	5·7	8 46	11·0	8 55	994	979	0 39	15	1,0,2,2,2,2,1,0	10	0	79·1
16 d	16 08	*666*	56	23 40	*610*	17 4	*37·9*	−10·2	23 48	48·1	15 38	1143	862	17 0	281	1,2,3,3,6,6,4,6	31	2	79·0
17 d	16 54	469	*−79*	0 25	548	16 57	29·6	*−52·2*	2 16	*81·8*	0 27	*1207*	*733*	3 22	*474*	6,6,4,3,2,4,3,2	30	2	79·3
18	19 15	395	308	1 45	87	19 28	28·8	0·2	2 7	28·6	19 52	1083	940	3 50	143	3,2,3,2,2,1,3,3	19	1	79·5
19 d	15 24	450	187	23 45	263	15 24	31·3	−15·1	21 32	46·4	18 25	1118	795	24 0	323	2,2,2,2,4,4,5,5	26	1	79·8
20	22 55	367	226	0 9	141	12 56	18·4	−13·3	0 15	31·7	13 17	1005	783	0 5	222	5,4,2,1,1,1,1,0	15	1	80·0
21 q	21 50	372	324	12 1	48	13 36	15·4	6·0	9 11	9·4	11 50	998	985	14 35	*13*	0,0,1,1,2,1,1,0	6	0	79·5
22 q	21 15	381	338	11 15	43	13 29	15·7	4·0	21 45	11·7	8 40	995	980	14 50	15	0,0,1,1,1,1,1,2	7	0	79·3
23 q	20 5	378	335	11 25	43	13 5	16·3	5·9	9 42	10·4	8 0	994	977	0 0	17	1,0,1,1,1,1,1,1	7	0	79·1
24	18 4	393	324	12 11	69	14 7	20·3	5·9	9 34	14·4	19 13	1018	963	1 50	55	2,1,1,2,2,2,2,1	13	1	79·3
25	7 20	385	317	13 36	68	13 11	20·9	−8·2	21 58	29·1	22 1	1008	951	24 0	57	1,1,2,2,2,2,1,3	14	1	79·0
26	6 10	383	314	12 42	69	13 25	19·5	−16·0	2 25	35·5	16 21	1006	857	1 58	149	4,3,2,2,2,2,1,3	19	1	78·5
27	20 15	381	333	11 50	48	13 15	18·2	0·1	0 14	18·1	0 8	998	954	4 45	44	2,2,1,2,1,2,1,1	12	0	78·0
28	19 40	382	335	11 53	47	14 13	20·9	−3·6	23 13	24·5	17 25	1007	946	23 56	61	1,1,1,1,2,2,1,3	12	1	78·0
Mean	- -	408	280	- -	128	- -	21·3	−2·9	- -	24·2	- -	1034	923	- -	110	-	-	-	79·1

q denotes an international quiet day and d an international disturbed day.

TERRESTRIAL MAGNETIC FORCE: HORIZONTAL COMPONENT

Mean values for periods of sixty minutes ending at exact hours, G.M.T.

17 LERWICK (H) — 14,000γ (0·14 C.G.S. unit) + — MARCH 1947

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1 q	374	375	372	369	370	370	367	371	367	347	342	342	345	357	359	364	371	371	374	374	378	378	379	370	366
2 d	371	367	367	369	375	378	377	361	401	382	354	355	364	349	385	390	378	489	637	647	534	457	63	-107	377
3 d	77	−7	89	122	272	328	303	299	255	296	337	400	326	387	433	398	509	558	354	77	−3	−236	−47	−50	*228*
4	43	-127	76	294	154	136	246	269	202	223	299	325	335	360	356	352	336	357	368	352	321	325	318	328	260
5	317	296	313	342	349	353	347	342	345	338	327	331	334	341	331	335	338	342	349	353	359	356	358	357	340
6 q	356	357	353	356	361	363	363	364	353	327	316	308	316	324	329	334	340	350	359	358	363	363	362	363	347
7	360	361	358	359	362	367	378	359	339	319	299	300	315	291	314	331	345	371	374	369	371	370	370	369	348
8 d	377	369	367	373	381	378	374	363	341	274	377	348	412	398	578	631	600	554	470	363	228	98	116	109	370
9	−96	88	146	181	252	274	270	197	234	327	319	322	346	340	356	371	363	345	357	371	353	354	349	341	282
10 q	344	341	345	352	355	357	359	352	338	313	304	298	313	329	313	327	340	345	349	360	364	364	364	361	341
11 q	360	357	359	362	363	365	365	361	340	322	318	313	305	320	331	338	344	352	357	363	367	367	367	367	349
12	370	375	372	374	370	392	396	385	370	340	331	328	316	320	354	363	334	353	364	369	374	371	370	371	361
13	373	371	370	367	373	373	376	368	357	343	330	331	321	326	339	344	356	364	376	383	381	385	378	377	361
14	377	369	375	377	379	380	382	387	373	369	360	359	375	370	407	495	575	374	356	365	371	361	357	362	*386*
15 d	337	331	350	351	346	322	307	300	372	273	319	349	370	467	528	735	710	406	326	330	329	336	331	303	380
16	321	322	324	323	326	326	321	321	312	309	311	319	317	327	352	393	425	446	416	378	365	284	206	146	329
17	31	154	225	140	226	269	284	317	318	323	318	327	341	347	366	355	358	377	372	354	369	355	350	345	301
18	351	346	345	327	332	352	354	351	343	333	329	320	330	343	348	352	392	354	354	375	381	365	355	356	349
19	360	357	345	345	354	358	360	352	335	332	321	321	331	334	333	342	369	380	375	378	370	352	357	351	350
20	345	354	357	348	355	358	367	363	355	346	334	333	333	348	356	365	368	365	384	374	363	370	366	365	357
21 q	366	362	359	367	362	366	364	359	354	338	334	338	335	347	367	367	373	367	374	341	384	384	360	355	359
22	363	364	367	356	334	377	377	356	338	306	312	317	323	338	355	338	365	378	385	378	367	367	368	367	354
23	367	365	364	366	373	366	360	360	356	339	328	336	358	335	372	495	646	428	353	360	355	350	351	344	376
24	338	333	283	198	240	323	322	343	335	331	324	316	321	338	353	363	361	365	366	366	364	364	362	342	331
25	362	367	366	366	359	352	344	335	331	316	323	326	326	336	348	361	369	373	381	387	373	365	341	283	350
26	343	243	305	278	293	320	336	333	322	337	336	318	347	405	435	455	470	448	415	387	369	353	339	355	356
27	346	342	346	343	358	356	363	360	349	317	315	313	317	324	335	359	393	408	415	392	385	391	341	286	352
28 d	251	153	24	89	327	364	323	252	254	296	324	349	418	552	572	550	553	523	502	460	300	281	185	214	338
29	252	328	334	343	341	343	342	334	319	302	290	297	319	338	351	370	381	389	425	366	347	356	327	280	336
30	-11	272	279	183	256	348	351	340	332	317	301	308	293	312	347	387	398	449	485	463	396	358	357	359	328
31	352	333	290	308	342	353	357	365	337	305	315	335	330	375	413	387	372	357	358	356	360	362	362	361	349
Mean	*293*	297	307	311	330	344	346	339	331	321	324	328	337	354	378	398	*414*	398	391	373	353	333	315	301	342

MAGNETIC DECLINATION (WEST)

Mean value for periods of sixty minutes ending at exact hours, G.M.T.

18 LERWICK (D) — 11° + — MARCH 1947

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′
1 q	10·5	7·9	8·2	7·3	6·3	7·0	7·0	7·7	8·5	9·4	11·9	15·4	17·8	19·0	17·4	15·6	13·6	12·3	12·8	12·1	12·1	11·1	7·0	7·9	11·1
2 d	9·3	7·4	5·1	6·5	9·3	3·9	3·8	5·9	5·3	13·4	14·3	17·8	23·8	19·5	20·4	23·0	17·3	24·4	18·9	53·4	29·8	19·2	-2·3	-41·8	12·8
3 d	-11·4	-22·3	-28·8	-4·4	3·9	5·6	15·3	14·8	8·7	5·1	9·4	8·7	14·7	21·9	22·1	21·6	19·6	13·4	39·8	-7·1	-27·5	-22·4	-5·5	-22·4	*3·0*
4	−6·6	−8·6	−5·2	2·4	19·1	27·2	30·0	14·8	1·5	15·3	10·7	11·2	13·3	13·9	11·2	12·8	11·0	9·3	-5·7	3·1	6·1	5·9	12·4	11·8	9·0
5	11·9	14·7	11·8	8·7	7·7	7·8	7·6	6·5	5·4	5·5	6·9	10·2	13·4	15·3	14·3	12·9	11·2	11·3	11·0	10·9	10·4	9·5	10·3	10·2	10·2
6 q	9·6	11·6	9·6	9·4	8·5	8·0	6·9	5·9	5·3	5·4	7·9	12·9	17·2	19·0	17·7	14·3	13·1	11·9	11·1	10·6	9·2	8·4	10·0	10·4	10·6
7	10·6	11·1	11·5	10·6	9·7	7·9	6·9	3·4	2·1	3·8	9·1	14·7	21·8	22·4	20·4	17·5	13·9	14·0	13·8	12·4	11·9	11·0	10·0	10·0	11·7
8 d	10·3	10·2	12·2	15·0	10·7	11·2	18·4	15·6	11·6	15·7	15·2	18·3	21·6	20·4	16·7	13·1	14·1	58·5	29·2	23·3	7·2	2·8	0·0	-24·7	*14·4*
9	−0·9	−5·2	−8·5	-11·1	3·1	4·5	7·1	19·5	4·3	7·6	10·4	13·4	17·4	19·3	18·2	14·3	15·2	12·3	10·2	8·8	5·6	4·2	8·8	10·8	7·9
10 q	10·1	11·3	10·2	8·7	8·4	8·6	7·8	6·9	5·4	6·2	9·1	13·9	20·6	21·9	18·4	16·4	14·2	11·8	9·6	11·1	11·0	10·4	10·3	9·6	11·3
11 q	10·4	11·0	10·5	10·0	9·9	9·1	7·3	5·9	5·3	6·3	9·8	14·8	17·6	18·4	17·5	14·9	13·2	12·4	12·0	11·9	11·7	11·2	10·9	10·7	11·4
12	11·8	9·3	9·9	9·5	13·4	13·2	6·8	5·8	5·9	6·0	8·4	16·1	18·5	19·8	22·2	20·0	14·4	13·3	13·4	13·3	13·0	11·4	10·3	10·3	12·3
13	10·2	9·6	9·3	9·7	9·4	9·3	8·0	6·5	4·5	5·7	8·7	14·1	18·8	19·5	20·6	18·3	16·3	11·6	12·4	12·4	12·4	13·0	11·5	9·6	11·7
14	12·2	12·3	12·2	12·7	15·3	12·9	8·1	3·8	5·1	9·3	10·3	14·8	18·2	16·6	17·2	17·1	21·4	11·8	12·8	13·2	10·0	12·3	10·9	7·2	12·4
15 d	11·3	5·8	8·5	7·8	9·3	11·7	14·5	7·6	-1·4	-6·3	-14·3	12·0	21·0	19·1	19·7	24·0	27·8	18·3	14·3	12·1	12·3	9·4	9·1	8·7	10·9
16	5·7	7·7	7·9	7·8	8·1	7·2	5·2	4·5	5·2	6·6	10·3	13·7	16·2	18·6	18·4	19·0	15·5	14·4	10·0	16·0	14·8	10·3	-2·0	-8·0	9·7
17	-2·6	-1·3	-0·8	-4·4	-0·8	7·4	11·2	9·5	3·7	6·7	11·9	14·1	14·0	13·6	14·3	12·9	12·0	7·8	8·9	11·1	6·9	6·8	9·0	7·5	7·5
18	8·4	10·0	8·4	9·8	8·6	7·4	6·0	5·1	4·9	5·5	7·0	11·4	15·0	17·1	16·7	15·3	10·8	11·2	11·4	12·1	7·9	9·2	9·6	10·2	10·0
19	9·5	5·5	4·1	4·7	5·6	5·1	3·7	4·1	5·3	4·5	7·1	11·4	15·9	16·6	16·0	15·0	13·5	10·8	11·6	11·2	5·6	7·3	7·5	5·2	8·6
20	10·3	7·0	2·6	5·2	5·6	6·7	3·3	5·1	3·7	3·8	6·6	12·3	15·2	17·0	18·0	17·4	16·2	13·4	13·3	9·2	8·4	8·6	6·5	4·4	9·2
21 q	5·2	7·5	8·0	9·8	9·0	7·5	6·2	5·3	5·1	8·4	11·1	16·2	17·8	18·8	19·9	17·5	17·3	13·1	12·5	12·4	12·2	8·4	2·6	5·6	10·7
22	9·0	7·8	6·1	7·1	4·9	5·3	7·1	5·4	6·1	12·9	16·3	19·7	20·4	22·0	22·3	17·5	16·8	13·8	1·4	5·5	10·3	12·7	12·0	10·6	11·4
23	9·7	8·7	4·7	5·9	6·1	6·2	8·3	7·0	7·5	10·6	13·1	19·0	21·6	20·6	18·9	14·7	15·8	14·0	11·2	11·8	9·3	9·0	8·2	10·1	11·3
24	11·7	5·0	3·9	7·3	13·0	25·2	23·2	6·2	3·9	6·2	9·4	10·8	13·3	15·1	15·6	15·2	13·3	13·1	11·8	10·7	11·8	11·0	10·6	12·8	11·7
25	10·9	9·2	7·0	5·6	5·9	8·4	10·2	8·6	6·6	6·4	9·3	12·9	15·6	16·8	16·1	15·0	12·3	10·1	10·9	8·1	9·3	5·9	5·7	3·7	9·6
26	-3·9	3·8	8·2	10·9	14·2	10·9	9·6	7·6	4·8	8·4	11·0	15·8	19·3	20·4	20·4	20·3	17·5	14·6	16·7	11·2	13·4	7·1	12·9	5·8	11·7
27	5·6	6·1	1·4	7·0	5·3	3·7	10·3	11·7	6·1	11·0	18·0	16·7	18·1	18·1	16·1	16·1	16·4	14·9	12·3	6·6	14·9	11·7	16·8	9·4	11·4
28 d	-1·6	-20·1	-28·5	-22·0	-7·3	5·6	10·7	19·4	13·3	18·1	13·9	14·1	17·6	16·3	18·9	17·1	20·9	12·1	16·2	27·8	21·9	10·3	5·2	5·6	8·6
29	1·1	5·4	4·5	4·3	4·5	4·3	2·9	2·5	2·9	4·8	8·3	14·4	17·4	16·4	17·1	17·1	15·6	14·7	11·9	9·5	8·7	8·2	7·0	−0·5	8·5
30	4·7	-3·4	-14·5	-10·6	-13·8	-2·4	1·4	2·3	2·3	2·6	9·9	14·3	18·9	20·6	23·7	23·8	19·4	13·4	16·5	14·7	12·0	10·7	9·5	8·7	7·7
31	8·4	6·2	6·1	0·5	6·0	7·8	10·2	4·6	7·3	11·5	11·8	16·1	17·8	17·8	16·9	16·9	11·6	9·8	11·4	11·7	10·9	10·6	10·0	9·6	10·5
Mean	6·5	4·9	*3·4*	4·9	7·1	8·5	9·2	7·7	5·4	7·6	9·8	14·2	17·7	*18·5*	18·2	17·0	15·5	14·5	13·0	12·6	10·1	8·5	7·9	4·2	10·3

TERRESTRIAL MAGNETIC FORCE: VERTICAL COMPONENT

Mean values for periods of sixty minutes ending at exact hours, G.M.T.

19 LERWICK (V) — 46,000γ (0·46 C.G.S. unit) + — MARCH 1947

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1 q	953	964	977	983	984	984	987	983	983	988	988	982	982	984	989	990	995	997	996	996	995	995	994	994	986
2 d	988	983	974	977	982	983	981	976	951	939	964	970	1007	1085	1080	1050	1041	1074	883	914	1042	925	921	977	986
3 d	1049	925	823	919	945	959	970	969	1014	1088	1094	1117	1126	1126	1125	1144	1162	1107	895	911	1157	943	1089	1281	1035
4	902	862	919	851	893	740	777	883	970	1006	988	989	996	1020	1057	1052	1038	1043	1051	979	996	1008	984	997	*958*
5	1002	988	952	989	1006	1006	1008	1009	1008	1007	1013	1011	1011	1018	1028	1029	1020	1014	1009	1007	1007	1007	1006	1002	1006
6 q	1000	991	1001	1007	1008	1007	1006	1004	1008	1010	1008	1005	998	1002	1006	1014	1014	1009	1007	1007	1004	1001	1001	1000	1005
7	1001	1002	1001	1001	1002	1002	1001	1007	1008	1007	1006	1000	1007	1020	1015	1024	1019	1008	1006	1006	1001	1001	1001	999	1006
8 d	989	994	995	971	967	976	976	977	988	1005	1007	1056	1110	1113	1087	1005	1056	986	1069	1054	989	1004	1095	1045	1021
9	807	795	831	927	916	927	970	971	1000	1049	1053	1060	1099	1088	1094	1100	1095	1105	1074	1069	1009	1006	1018	1015	1003
10 q	1012	1008	1013	1014	1017	1018	1018	1020	1026	1032	1029	1023	1019	1027	1032	1019	1019	1025	1025	1014	1012	1009	1007	1007	1018
11 q	1002	1003	1006	1007	1007	1008	1010	1014	1019	1014	1012	1009	1007	1002	1012	1013	1010	1007	1007	1007	1006	1004	1002	1001	1008
12	994	979	994	995	989	973	982	993	1001	1008	1007	1002	1001	989	989	1010	1020	1007	1002	1002	1001	1001	1001	996	997
13	995	996	996	998	995	999	1000	1006	1010	1008	1007	997	992	989	983	990	994	995	995	994	1001	995	983	974	995
14	968	970	976	983	976	980	980	996	1006	1009	1014	1020	1033	1068	1089	1138	1212	1134	1051	1036	1051	1033	1020	1014	1031
15 d	971	931	947	970	965	960	936	964	994	1057	1092	1032	1014	1069	1174	1136	1116	1203	1109	1067	1051	1057	1058	986	*1036*
16	1007	1014	1009	1013	1014	1015	1017	1019	1019	1014	1014	1014	1016	1019	1041	1076	1097	1104	1090	1074	1074	1033	937	859	1024
17	916	922	901	891	867	902	939	967	1007	1020	1021	1027	1033	1031	1043	1051	1050	1051	1041	1027	1014	1007	1002	994	988
18	980	1001	1007	1007	996	1007	1013	1019	1020	1019	1019	1016	1011	1016	1026	1035	1051	1040	1014	1008	1020	1009	1014	1009	1015
19	994	964	971	972	987	1001	1006	1008	1014	1018	1014	1008	1002	1009	1007	1009	1016	1026	1025	1027	1020	1020	1019	1006	1006
20	969	932	944	956	923	932	964	979	987	998	1001	1000	1001	1001	1007	1018	1024	1019	1019	1038	1031	1017	1013	1006	991
21 q	994	999	1000	999	1000	993	992	994	993	994	990	987	988	988	992	1006	1017	1019	1006	1000	1000	1004	996	995	998
22	1000	1003	1001	944	855	820	886	947	977	988	980	981	994	1006	1016	1027	1013	1031	1062	1043	1025	1006	1000	993	983
23	985	968	969	982	988	983	981	981	978	987	986	987	995	1007	1013	1078	1170	1155	1090	1056	1056	1032	993	976	1016
24	980	939	901	838	882	868	905	959	982	992	1000	1006	1003	1001	1008	1013	1018	1018	1020	1019	1008	1001	975	939	970
25	946	982	997	996	995	996	991	992	997	1006	1005	1000	1000	1007	1013	1018	1026	1035	1030	1017	995	986	946	852	993
26	886	861	845	840	866	880	941	971	991	1006	1025	1026	1036	1051	1082	1098	1118	1121	1118	1070	1023	943	915	968	987
27	964	940	961	947	979	962	950	964	986	1001	1008	1006	1002	1004	1012	1011	1037	1070	1097	1076	1060	1047	993	966	1001
28 d	880	885	912	939	885	966	1009	1019	1033	1012	1048	1073	1106	1117	1129	1132	1088	1080	1116	1099	1126	1070	1033	960	1030
29	958	993	1022	1019	1033	1044	1049	1049	1049	1021	1024	1017	1017	1027	1032	1043	1061	1074	1082	1032	997	1019	966	931	1023
30	911	900	880	818	852	936	1003	1010	1016	1012	1012	1017	1030	1030	1017	1033	1079	1104	1100	1117	1092	1042	1021	1004	1001
31	975	936	893	912	978	985	973	991	1001	1012	1002	1022	1048	1093	1116	1092	1079	1052	1022	1012	1012	1011	1010	1009	1010
Mean	967	956	955	*954*	960	962	975	989	1001	1011	1014	1015	1022	1033	1042	1047	*1056*	1055	1036	1025	1028	1008	1000	992	1004

DAILY EXTREMES OF TERRESTRIAL MAGNETIC ELEMENTS, MAGNETIC CHARACTER FIGURES AND TEMPERATURE IN MAGNET HOUSE

20 LERWICK — MARCH 1947

	TERRESTRIAL MAGNETIC ELEMENTS												3-hr. range indices *K*	Sum of *K* indices	Magnetic character of day (0-2)	Temperature in magnet house 200 +
	Horizontal force					Declination			Vertical force							
	Maximum 14,000γ +		Minimum 14,000γ +		Range	Maximum 11° +		Minimum 11° +		Range	Maximum 46,000γ +		Minimum 46,000γ +		Range				
	h. m.	γ	γ	h. m.	γ	h. m.	′	′	h. m.	′	h. m.	γ	γ	h. m.	γ				°A.
1 q	0 55	385	339	11 58	*46*	13 43	19·7	5·1	04 25	*14·6*	18 40	999	946	0 51	53	2,1,1,1,1,1,1,2	10	0	77·8
2 d	19 9	884	-225	23 45	1109	19 6	107·0	-60·7	23 15	167·7	20 10	1156	539	19 00	617	2,3,4,4,4,5,7,8	37	2	78·5
3 d	17 59	783	-475	21 32	*1258*	18 31	*144·1*	*-111·9*	21 01	*256·0*	23 33	*1632*	*404*	18 30	*1228*	7,6,5,5,5,7,8,8	51	2	78·0
4	18 55	414	*-640*	1 30	1054	01 32	50·9	-57·2	01 43	108·1	02 02	1213	614	05 38	599	8,7,6,5,3,3,5,3	40	2	78·8
5	20 38	364	280	1 25	84	01 37	19·5	3·0	08 54	16·5	14 34	1032	936	02 07	96	3,2,2,2,2,2,1,1	15	0	79·0
6 q	21 41	369	306	11 41	63	12 53	20·1	3·5	08 38	16·6	15 33	1019	988	01 45	31	2,1,1,1,1,2,1,1	10	0	79·0
7	18 11	396	277	13 0	119	13 23	26·5	1·9	09 30	24·6	13 14	1027	989	11 55	38	1,2,2,3,3,3,2,1	17	1	79·4
8 d	14 50	955	-137	24 00	1092	17 15	113·1	-81·5	23 45	194·6	23 00	1293	549	23 57	744	2,3,3,5,7,7,7,8	42	2	79·4
9	15 05	388	-370	0 18	758	00 35	114·6	-65·5	00 25	180·1	17 38	1114	562	00 31	552	7,6,4,3,2,3,4,3	32	1	79·7
10 q	20 18	369	295	11 22	74	13 00	23·1	5·0	08 41	18·1	14 05	1038	1005	24 00	33	1,2,1,1,2,1,2,0	10	0	80·0
11 q	23 11	370	293	12 15	77	14 03	20·5	3·1	08 25	17·4	08 35	1024	998	23 13	*26*	0,0,2,2,2,2,1,0	9	0	79·8
12	15 21	413	291	12 37	122	15 09	26·8	0·5	08 01	26·3	15 48	1032	964	05 51	68	2,3,2,2,3,4,2,1	19	1	79·8
13	19 31	406	296	12 25	110	14 00	24·9	2·1	08 30	22·8	08 21	1015	969	23 29	46	1,1,3,2,3,2,2,2	16	1	79·5
14	16 37	674	345	11 10	329	16 35	33·1	-1·1	07 59	34·2	16 22	1226	964	00 27	262	2,2,2,2,3,6,3,3	23	1	79·0
15 d	15 52	*1003*	206	8 52	797	16 20	39·9	-30·7	10 38	70·6	16 54	1237	919	01 13	318	4,3,5,5,5,8,4,4	38	2	78·3
16	17 45	469	122	23 27	347	15 22	20·6	-18·1	22 20	38·7	18 04	1138	814	23 52	324	2,1,1,2,3,4,4,5	22	1	78·6
17	18 3	399	-221	0 30	620	00 52	28·3	-23·4	00 59	51·7	00 41	1087	823	00 02	264	7,6,4,2,2,3,3,2	29	1	79·0
18	20 54	457	310	11 51	147	14 04	19·0	-11·0	20 52	30·0	16 55	1055	975	00 31	80	2,2,1,2,2,3,4,3	19	1	79·9
19	20 12	406	319	11 24	87	12 57	19·3	-5·6	20 05	24·9	20 02	1033	958	01 50	75	3,2,2,1,2,3,3,2	18	0	80·0
20	18 25	392	321	12 24	71	14 47	19·2	-1·6	04 23	20·8	19 38	1049	915	04 16	134	3,3,2,1,2,2,3,2	18	0	80·4
21 q	21 21	389	325	10 40	64	14 43	23·7	-0·8	22 43	24·5	16 50	1025	979	22 52	46	2,1,1,2,3,2,1,3	15	0	80·4
22	18 43	401	295	9 48	106	13 55	23·8	-3·8	18 32	27·6	18 19	1082	806	05 23	276	1,5,4,2,3,3,3,2	23	1	80·5
23	16 28	713	311	11 16	402	16 44	27·3	-0·8	16 08	28·1	16 37	1201	950	01 50	251	3,2,2,3,4,6,3,3	26	1	80·0
24	22 14	377	157	3 24	220	05 54	34·3	-8·6	02 30	42·9	19 06	1029	778	03 28	251	5,5,4,2,2,2,3,4	27	1	81·8
25	19 56	405	245	23 40	160	13 27	17·8	-7·4	24 00	25·2	18 00	1036	815	23 31	221	4,2,2,2,2,2,3,5	22	1	81·9
26	16 12	479	166	1 48	313	04 20	23·7	-11·6	21 18	35·3	17 04	1142	795	01 49	347	5,4,3,3,4,3,5,4	31	1	81·9
27	21 41	474	252	23 29	222	22 09	34·7	-1·0	19 00	35·7	18 45	1100	893	24 00	207	3,3,3,3,2,4,4,5	27	1	82·1
28 d	16 19	745	-177	2 50	922	20 40	40·0	-60·1	02 46	100·1	15 19	1177	792	02 31	385	7,7,5,4,5,6,6,6	46	2	82·5
29	19 21	481	135	00 01	346	19 37	36·0	-18·9	19 22	54·9	19 37	1119	920	00 30	199	6,1,2,2,3,3,5,4	26	1	82·5
30	18 34	493	-213	00 31	706	00 39	32·2	-31·8	02 28	64·0	19 30	1135	775	03 19	360	7,6,3,3,3,4,4,3	33	1	82·6
31	14 13	456	254	2 43	202	13 06	21·6	-2·4	03 42	24·0	14 27	1123	861	03 00	262	4,4,3,3,4,3,1,0	22	1	82·4
Mean	- -	507	119	- -	388	- -	38·9	-19·1	- -	58·0	- -	1116	845	- -	271	-	-	0·94	80·1

q denotes an international quiet day and d an international disturbed day.

TERRESTRIAL MAGNETIC FORCE: HORIZONTAL COMPONENT

Mean values for periods of sixty minutes ending at exact hours, G.M.T.

21 LERWICK (H) — 14,000γ (0·14 C.G.S. unit) + — APRIL 1947

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1 q	355	356	356	353	355	359	355	351	335	312	304	301	299	319	339	347	361	370	380	379	383	383	379	377	350
2	375	372	370	369	371	372	377	372	362	340	330	322	329	350	336	340	371	388	380	376	376	382	380	380	363
3	378	378	377	370	373	372	376	366	340	319	308	305	316	336	347	370	371	367	380	391	398	391	387	380	362
4	384	370	370	373	379	380	391	379	345	308	297	301	328	367	373	369	449	470	425	408	376	351	286	290	365
5	260	355	358	358	362	369	374	368	349	319	315	317	334	334	346	358	366	389	390	376	378	380	380	378	355
6	373	379	360	324	358	377	380	366	348	315	304	309	326	340	362	382	362	378	387	389	383	380	376	378	360
7	374	373	376	374	374	379	382	376	358	330	317	315	304	326	323	401	394	372	365	370	373	377	387	384	363
8	377	376	376	373	376	380	380	376	360	340	306	298	322	340	350	343	361	369	376	383	383	388	405	282	359
9 d	204	352	366	373	370	328	322	283	291	283	307	306	296	290	312	346	354	353	369	374	369	372	360	359	*331*
10	356	348	339	349	358	361	354	336	336	324	312	305	311	322	337	360	368	373	380	379	375	376	375	376	350
11	363	366	360	358	338	354	358	353	344	328	314	316	306	325	376	398	428	431	402	387	375	373	372	354	362
12	359	359	359	362	361	355	337	333	323	311	315	317	315	347	356	383	395	413	402	383	380	380	359	358	357
13	354	334	336	362	358	355	358	362	348	330	317	308	325	337	377	380	395	400	398	398	388	384	375	362	360
14	370	366	362	371	366	362	351	354	358	354	337	341	348	370	365	390	383	376	401	408	398	373	370	369	368
15	372	339	320	304	341	371	367	359	348	319	302	329	331	349	379	403	418	395	393	397	402	381	367	376	361
16	367	368	366	363	366	366	363	345	341	334	324	327	331	354	373	396	363	391	417	399	379	373	360	341	363
17 d	303	354	345	359	354	355	357	356	347	334	327	325	384	428	360	544	606	644	794	658	132	251	−88	109	372
18 d	302	298	310	308	314	327	338	337	331	328	333	352	341	407	450	616	475	325	345	366	374	344	306	321	356
19 d	325	317	258	318	343	344	337	315	324	309	300	324	370	377	344	359	407	425	381	363	356	361	364	359	345
20 d	363	366	365	370	371	314	317	334	346	323	323	330	327	313	338	349	352	403	457	403	370	363	363	360	355
21 q	363	366	363	359	345	349	389	342	352	345	338	331	331	342	350	356	363	371	374	374	378	378	374	377	357
22 q	376	371	370	370	370	373	374	363	348	334	325	321	325	335	345	356	367	378	381	385	382	381	381	384	362
23 q	388	381	377	377	377	385	381	370	359	341	329	325	338	343	359	370	378	385	392	396	392	391	388	385	370
24 q	385	384	384	384	385	381	377	367	352	335	319	309	313	331	350	363	374	381	385	388	389	389	388	388	367
25	388	386	385	387	388	388	384	377	363	347	332	309	319	338	363	399	449	405	422	399	403	396	390	398	380
26	397	389	388	383	384	381	377	371	359	352	341	337	347	353	364	388	401	432	426	420	408	393	391	380	*382*
27	378	374	377	381	383	388	396	397	387	357	330	319	327	351	389	366	383	402	413	415	396	380	377	379	377
28	381	377	371	371	349	344	368	363	348	331	317	310	337	375	373	369	388	391	384	401	393	390	385	382	367
29	377	372	374	376	374	378	380	373	361	345	327	331	370	353	366	352	373	385	391	391	389	388	383	384	371
30	384	376	374	378	366	367	374	367	356	346	325	318	338	342	367	363	381	391	421	399	395	384	380	378	370
Mean	358	363	360	362	364	364	364	357	347	330	319	*319*	330	347	359	384	395	398	*407*	399	376	374	357	358	362

MAGNETIC DECLINATION (WEST)

Mean values for periods of sixty minutes ending at exact hours, G.M.T.

22 LERWICK (D) — 11° + — APRIL 1947

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′
1 q	9·4	8·7	7·6	7·3	6·8	5·6	4·3	3·3	5·8	6·6	9·0	13·4	15·4	20·0	19·7	18·0	16·3	13·6	12·8	12·2	10·9	5·3	6·8	9·4	10·3
2	9·8	9·7	10·2	11·4	8·4	7·1	7·1	4·3	3·3	2·3	4·8	9·4	14·9	18·0	16·9	15·2	12·8	9·4	9·4	11·3	11·5	11·3	10·9	10·3	10·0
3	9·9	10·2	11·7	15·1	5·5	4·9	3·3	2·1	2·3	3·2	7·4	12·3	17·2	20·6	19·9	19·0	16·0	12·8	12·3	11·4	12·1	13·2	10·2	8·3	10·9
4	4·2	6·0	5·9	6·7	7·4	10·1	9·0	7·1	4·8	5·8	13·3	19·8	23·2	17·6	19·5	15·5	9·1	13·8	12·2	9·0	3·8	5·7	0·4	−1·2	9·5
5	1·5	5·5	7·9	7·7	6·3	5·1	2·9	1·3	1·7	3·6	9·4	15·2	18·4	17·7	15·9	12·8	10·4	9·4	9·4	10·1	9·1	10·9	10·1	10·5	8·9
6	10·4	10·9	13·6	7·4	2·2	7·2	4·3	4·7	2·0	6·6	10·7	15·2	18·9	19·3	17·8	14·1	9·8	8·8	7·7	9·9	11·7	9·8	10·6	11·4	10·2
7	10·8	9·9	10·1	8·8	8·2	6·9	5·2	2·8	1·6	2·8	7·1	12·8	17·5	19·7	18·0	17·7	12·6	11·0	11·7	12·1	11·8	11·4	10·8	4·4	10·2
8	9·2	9·9	9·0	8·8	7·8	6·4	4·3	2·3	1·5	3·7	9·3	12·8	20·1	21·3	18·9	16·4	13·2	11·2	11·4	11·8	11·7	11·7	13·1	16·2	10·9
9 d	6·9	3·2	1·7	7·0	9·9	12·6	4·7	3·4	−1·0	3·8	8·7	7·6	18·4	19·0	14·7	11·4	9·2	9·7	10·6	11·2	10·9	11·7	9·9	7·8	8·9
10	7·1	8·4	10·3	7·0	5·8	6·5	4·9	8·1	6·4	2·3	4·0	8·9	14·4	16·7	17·1	16·3	14·5	13·6	12·5	12·2	11·4	10·2	10·0	13·6	10·1
11	4·8	3·8	6·2	5·0	7·0	5·1	3·7	0·3	0·0	3·3	6·2	4·1	15·2	17·3	19·3	19·0	17·9	13·2	9·9	11·3	11·4	11·4	9·0	4·0	8·7
12	6·4	6·5	5·8	4·6	4·6	4·8	4·3	2·9	1·6	4·3	9·1	14·2	19·1	23·6	21·1	19·6	16·7	14·0	8·8	9·5	13·0	6·1	−0·7	1·3	9·2
13	3·5	5·8	−0·9	3·5	3·7	5·7	5·0	3·3	2·7	5·5	10·1	15·1	20·2	18·4	19·8	15·1	15·4	13·1	12·1	10·8	9·3	4·4	6·8	6·2	8·9
14	3·2	−0·4	−0·1	0·0	4·9	5·2	5·1	4·2	4·6	6·8	11·7	15·4	17·3	18·9	17·9	17·3	13·1	12·1	13·5	11·7	4·6	5·8	6·1	6·9	*8·6*
15	8·6	−3·2	0·4	5·5	5·5	8·7	7·9	4·4	3·0	6·7	13·5	17·1	19·3	20·5	17·4	17·8	14·9	11·8	9·5	11·6	12·7	8·7	11·3	8·3	10·1
16	7·9	10·2	10·4	5·5	4·3	3·7	4·7	7·5	7·6	7·5	8·8	12·3	16·4	17·4	18·2	16·0	13·1	12·6	7·5	9·3	8·0	9·6	8·2	2·7	9·6
17 d	−3·9	1·7	8·3	6·0	4·3	6·8	5·7	6·5	6·8	8·5	11·0	13·6	17·3	23·4	31·4	37·4	30·3	31·2	37·2	49·7	34·1	33·4	−13·5	−13·5	*15·6*
18 d	2·7	−2·1	−5·4	−2·6	−0·5	2·7	5·8	8·2	10·8	14·4	15·5	18·3	17·6	18·5	22·7	11·8	19·0	14·5	12·0	14·3	16·5	−8·7	3·7	8·6	9·1
19 d	7·9	4·6	11·6	6·2	3·7	3·6	3·7	4·6	5·4	7·5	8·6	11·6	17·8	18·9	18·9	15·6	14·6	9·3	11·7	11·6	12·0	11·6	10·7	6·1	9·9
20 d	13·0	6·3	5·8	5·9	7·7	13·0	15·4	8·0	5·5	7·5	10·7	11·9	14·9	15·1	13·9	13·1	11·3	13·0	6·3	8·3	10·3	11·0	10·2	9·3	10·3
21 q	9·8	9·2	8·9	9·6	13·0	9·8	8·3	5·5	4·1	5·8	7·5	11·6	13·4	13·3	13·0	12·2	11·2	10·5	10·3	10·1	10·0	9·9	10·3	10·1	9·9
22 q	9·2	8·8	8·3	7·5	7·5	6·0	4·3	2·3	1·1	2·5	6·1	11·3	15·4	16·9	16·0	14·5	13·0	11·3	10·2	9·9	10·1	10·3	10·2	10·7	9·3
23 q	10·5	9·3	9·5	9·0	8·9	4·2	2·2	1·5	1·7	5·1	10·3	14·6	18·9	20·1	19·1	16·4	14·3	13·0	12·3	12·6	12·1	11·5	11·1	9·7	10·7
24 q	9·7	9·4	9·3	8·7	7·6	6·3	5·4	3·5	2·2	3·7	7·1	11·5	15·9	19·1	19·3	17·1	15·1	13·3	12·2	11·7	11·5	11·2	10·6	9·6	10·5
25	9·3	8·9	8·4	7·7	6·9	5·9	4·7	3·2	1·9	3·5	8·6	12·6	16·8	18·4	17·8	15·4	15·2	17·1	13·6	13·0	14·5	13·6	12·7	13·0	10·9
26	11·6	13·8	9·1	7·0	4·7	2·4	1·1	1·4	3·1	3·7	8·2	12·0	16·5	19·0	17·9	16·0	15·2	14·1	13·7	12·4	12·5	9·6	8·2	4·2	9·9
27	8·2	7·6	7·4	6·1	6·1	4·9	4·2	4·4	1·5	5·7	7·5	10·4	14·4	15·8	15·5	12·7	11·3	11·3	8·8	8·0	8·6	10·3	10·2	10·4	8·8
28	10·8	10·3	8·3	9·8	9·3	8·0	1·7	0·1	1·0	3·5	7·8	12·3	15·7	17·2	15·2	14·6	12·5	11·1	10·7	10·6	8·3	11·7	10·2	8·2	9·5
29	10·3	10·1	9·2	9·3	10·7	6·6	6·4	2·5	1·3	8·9	14·2	15·4	20·8	20·5	18·1	13·7	11·7	10·3	10·1	11·1	11·1	10·8	10·5	11·0	11·0
30	12·2	8·7	7·7	8·2	11·4	10·5	7·0	4·4	3·3	6·5	10·3	13·1	16·3	18·1	17·9	15·1	12·4	11·3	11·6	9·2	10·2	11·3	10·7	10·3	10·7
Mean	7·8	7·1	7·2	7·0	6·7	6·5	5·2	3·9	*3·3*	5·4	9·2	12·9	17·3	*18·7*	18·3	16·2	14·1	12·7	11·7	12·3	11·5	10·2	8·3	7·6	10·0

TERRESTRIAL MAGNETIC FORCE: VERTICAL COMPONENT

Mean values for periods of sixty minutes ending at exact hours, G.M.T.

23 LERWICK (V) — 46,000γ (0·46 C.G.S. unit) + — APRIL 1947

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1 q	1010	1010	1009	1010	1007	1006	1009	1006	1006	1010	1010	1008	1006	999	1005	1004	999	999	1000	1003	1004	1001	998	999	1005
2	1003	1004	999	993	993	998	994	998	1003	1006	1008	1007	1006	1017	1025	1017	1016	1024	1023	1006	1003	999	998	999	1006
3	1001	1002	997	961	949	978	997	996	999	999	998	989	985	984	986	986	991	993	992	991	991	991	978	964	987
4	946	976	984	996	992	985	976	979	990	994	991	993	1016	1071	1042	1056	1099	1110	1108	1071	1026	991	930	901	1009
5	886	941	977	1005	1011	1009	1005	1004	1004	1003	998	1003	1010	1021	1016	1011	1006	1003	1016	1015	1005	997	993	981	997
6	985	987	972	872	902	930	960	974	990	996	997	996	997	1003	1009	1024	1046	1033	1028	1022	1005	1002	993	985	988
7	985	992	998	998	1003	1002	1003	1004	1005	1003	997	992	997	1003	1015	1021	1072	1058	1015	1003	997	997	990	985	1006
8	990	997	998	1003	1002	1002	1003	1003	1006	998	998	990	991	1010	1028	1020	1003	997	992	996	997	990	976	902	996
9 d	778	899	941	971	966	945	938	972	982	1020	1047	1072	1018	1003	1023	1028	1052	1041	1030	1028	1021	1010	1008	1005	992
10	997	1002	990	997	1011	1016	1020	1010	1004	1010	1010	1008	1002	1003	1006	1008	1010	1009	1008	1008	1007	1003	997	961	1004
11	923	960	985	995	987	966	984	997	1006	1011	1010	1009	1006	997	997	1020	1040	1072	1072	1047	1028	1016	998	971	1004
12	978	993	992	990	997	994	994	996	1003	1009	1010	1015	1013	1010	1028	1035	1048	1053	1038	1023	1013	1001	954	947	1006
13	963	961	904	958	979	986	985	990	998	1003	1002	997	992	1003	1006	1027	1023	1023	1023	1022	1015	998	985	979	993
14	967	959	959	961	960	961	967	978	985	987	994	998	1005	1014	1005	1009	1023	1010	998	1016	1014	997	991	990	990
15	947	922	910	912	914	935	958	977	988	991	990	990	998	1003	1016	1022	1028	1035	1028	1010	1009	1022	991	985	983
16	985	978	941	978	991	994	992	992	991	991	992	996	1003	1016	1023	1034	1040	1023	1042	1034	1023	1016	998	958	1001
17 d	929	954	966	940	954	935	953	962	971	979	985	984	967	990	1008	1022	1144	1186	977	842	1002	932	1076	922	*983*
18 d	1034	992	1003	1020	1022	1021	1010	1015	1017	1022	1029	1059	1103	1134	1115	1171	1165	1113	1064	1039	1023	985	966	972	*1046*
19 d	984	991	962	991	1016	1019	1016	1016	1016	1021	1023	1041	1036	1059	1059	1052	1046	1059	1042	1030	1016	1012	1002	984	1021
20 d	947	997	1006	1010	998	986	930	941	953	972	992	1015	1026	1029	1023	1021	1016	1010	1062	1058	1040	1021	1005	1003	1003
21 q	1004	1009	1010	1010	985	966	979	988	998	1003	1003	1003	998	998	1002	1003	1003	1004	1005	1003	998	998	999	997	999
22 q	997	1003	1006	1009	1008	1005	1004	1005	1004	1001	992	987	987	991	995	997	998	1001	1003	1002	998	997	997	995	999
23 q	991	997	999	1003	1000	1003	1004	1003	997	992	988	984	979	985	990	997	997	997	997	992	992	992	994	997	995
24 q	997	998	1002	1004	1005	1008	1005	1000	997	991	990	986	984	980	981	984	989	994	997	997	997	997	995	995	995
25	993	997	998	999	1003	1004	1004	1003	1002	996	991	985	979	979	985	998	1013	1033	1029	1028	1007	1002	997	989	1001
26	986	979	983	998	1004	1007	1008	1004	996	988	986	986	984	988	993	999	1017	1031	1045	1049	1035	1009	991	987	1002
27	999	1000	1001	999	1004	998	991	992	998	998	1000	998	993	994	1006	1025	1022	1016	1023	1029	1029	1016	1004	999	1006
28	994	992	998	999	990	957	955	979	985	988	987	984	979	998	1024	1017	1016	1017	1008	1006	1016	1004	998	993	995
29	996	998	999	999	996	990	991	994	999	996	1003	998	993	1004	1017	1020	1016	1011	1011	1005	1004	1004	1003	998	1002
30	986	961	972	981	980	960	965	974	986	994	997	991	982	990	998	1006	1005	1004	1003	1019	1011	1006	1000	1000	991
Mean	*973*	982	982	985	988	986	987	992	996	999	1001	1002	1001	1009	1014	1021	1031	*1032*	1023	1013	1011	1000	*994*	978	1000

DAILY EXTREMES OF TERRESTRIAL MAGNETIC ELEMENTS, MAGNETIC CHARACTER FIGURES AND TEMPERATURE IN MAGNET HOUSE

24 LERWICK — APRIL 1947

	TERRESTRIAL MAGNETIC ELEMENTS												3-hr. range indices K	Sum of K indices	Magnetic character of day (0-2)	Temperature in magnet house 200 +
	Horizontal force					Declination			Vertical force							
	Maximum 14,000γ +		Minimum 14,000γ +		Range	Maximum 11° +	Minimum 11° +	Range	Maximum 46,000γ +		Minimum 46,000γ +		Range			
	h. m.	γ	γ	h. m.	γ	h. m.	′	′	h. m.	′	h. m.	γ	γ	h. m.	γ				°A.
1 q	20 59	392	293	12 11	99	13 39	22·3	1·5	7 20	20·8	0 13	1012	995	22 33	*17*	0,1,2,2,3,2,2,2	12	0	82·0
2	17 44	394	317	15 08	77	13 20	19·6	0·5	7 42	19·1	18 05	1032	990	3 54	42	1,2,2,2,3,3,2,1	16	1	82·0
3	20 00	416	301	11 29	115	13 49	21·1	0·9	7 25	20·2	1 42	1004	930	4 5	74	2,3,2,2,2,3,3,3	20	1	82·0
4	17 10	496	239	22 49	257	12 8	26·6	−3·2	20 30	29·8	18 7	1127	892	23 17	235	3,2,3,3,4,4,4,4	27	1	81·5
5	17 59	418	171	00 28	247	12 35	19·4	−5·8	0 49	25·2	13 44	1024	855	0 25	169	5,1,2,2,2,3,3,2	20	1	81·6
6	18 14	396	276	11 55	120	2 55	23·7	−5·0	4 11	28·7	16 44	1051	848	3 27	203	3,4,3,3,3,3,3,2	24	1	81·1
7	15 58	423	292	12 40	131	13 38	20·8	0·0	23 25	20·8	16 47	1090	979	0 1	111	2,1,2,2,3,4,2,3	19	1	82·1
8	21 52	442	−87	23 57	529	23 45	44·6	−2·0	24 0	46·6	14 30	1033	724	23 59	309	1,1,2,3,3,2,1,7	20	1	82·3
9 d	03 38	383	−28	00 01	411	13 8	21·7	−7·6	0 9	29·3	11 28	1084	737	0 18	347	7,3,3,4,3,3,2,2	27	1	82·8
10	23 20	387	297	11 44	90	14 48	18·1	0·9	9 13	17·2	6 49	1022	927	24 0	95	2,2,3,2,2,2,1,3	17	1	83·2
11	17 39	437	298	11 55	139	14 25	20·9	−2·1	8 15	23·0	18 10	1080	912	0 13	168	3,3,2,2,3,3,3,3	22	1	83·2
12	17 54	435	304	09 32	131	13 20	24·7	−11·4	21 56	36·1	17 05	1059	935	23 32	124	2,2,1,2,3,3,3,4	20	1	84·1
13	17 45	407	302	11 42	105	14 14	21·4	−4·8	2 11	26·2	15 38	1033	878	2 12	155	4,3,1,2,3,2,3,2	20	1	85·0
14	19 21	416	330	10 30	86	13 21	20·0	−8·2	21 40	28·2	19 49	1028	948	4 41	80	2,2,2,2,2,2,4,3	19	1	84·8
15	16 30	428	284	03 57	144	13 23	21·7	−10·4	1 35	32·1	16 56	1040	886	4 6	154	4,4,3,2,3,2,2,3	23	1	85·2
16	18 28	432	278	24 00	154	14 29	19·3	−3·4	24 0	22·7	18 27	1049	930	2 24	119	3,2,2,2,3,3,3,4	22	1	85·0
17 d	18 33	*923*	*−944*	22 07	*1867*	19 41	*92·0*	*−50·3*	22 45	*142·3*	22 03	*1654*	*674*	19 37	*980*	4,2,2,1,5,6,8,8	36	2	85·0
18 d	15 15	655	168	00 01	487	14 32	27·2	−35·8	20 30	63·0	15 38	1199	909	21 40	290	5,3,3,3,5,6,3,6	34	2	85·0
19 d	17 13	443	219	02 31	224	13 12	22·0	−3·2	23 18	25·2	13 40	1069	922	2 47	147	4,4,3,3,3,4,3,4	28	1	85·1
20 d	18 51	491	279	05 34	212	6 38	21·7	−11·5	18 53	33·2	18 52	1122	908	6 45	214	4,4,4,3,3,4,4,1	27	1	84·5
21 q	23 59	385	324	11 50	*61*	13 0	14·4	1·1	7 40	*13·3*	2 47	1013	954	5 18	59	1,3,2,1,1,1,1,1	11	0	84·5
22 q	19 38	388	317	11 33	71	13 13	17·7	0·2	8 21	17·5	4 2	1010	984	11 58	26	1,0,2,1,1,2,0,0	7	0	84·7
23 q	19 34	401	323	11 52	78	13 24	20·5	0·5	7 52	20·0	3 56	1008	978	12 20	30	1,2,1,2,2,2,1,0	11	0	85·0
24 q	21 00	392	305	11 40	87	13 53	19·8	1·9	8 34	17·9	5 40	1010	979	12 50	31	0,1,1,2,2,1,0,0	7	0	85·4
25	16 39	496	303	11 42	193	13 10	18·9	1·5	8 34	17·4	18 6	1042	977	13 10	65	0,0,1,2,3,4,3,2	15	1	85·1
26	17 08	468	331	11 29	137	13 36	20·2	−1·1	6 54	21·3	19 49	1060	968	1 36	92	3,2,2,2,2,4,3,3	21	1	85·0
27	19 48	428	309	11 33	119	14 28	18·6	−3·9	8 48	22·5	19 22	1038	986	6 47	52	2,1,2,3,4,3,3,2	20	1	85·0
28	17 23	409	306	11 32	103	13 18	18·1	−3·9	7 23	22·0	14 56	1032	942	5 57	90	2,3,3,2,3,3,2,2	20	1	85·0
29	12 22	409	310	10 21	99	12 25	22·7	−0·7	8 24	23·4	14 57	1026	978	12 25	48	1,2,2,2,4,3,2,1	17	1	85·3
30	18 29	431	310	10 39	121	14 8	19·6	0·9	8 32	18·7	19 23	1023	954	5 29	69	3,2,2,2,3,3,3,1	19	1	85·3
Mean	- -	447	224	- -	223	- -	24·0	−5·5		29·5	- -	1069	916	- -	153	-	-	0·90	83·9

q denotes an international quiet day and d an international disturbed day.

TERRESTRIAL MAGNETIC FORCE: HORIZONTAL COMPONENT

Mean values for periods of sixty minutes ending at exact hours, G.M.T.

25 LERWICK (H) — 14,000γ (0·14 C.G.S. unit) + — MAY 1947

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1	376	376	377	373	373	352	345	360	353	330	327	333	362	350	347	375	403	410	386	392	388	383	374	367	367
2 q	364	363	358	353	362	367	363	355	342	331	326	329	340	357	361	366	375	383	386	386	383	383	385	379	362
3	378	375	373	369	371	371	367	362	352	336	323	323	340	361	374	391	403	405	395	389	383	380	380	380	370
4	381	381	379	377	375	369	359	349	339	323	317	328	341	355	370	374	381	392	414	405	394	389	386	383	369
5	383	384	382	382	377	380	369	353	343	333	321	327	346	361	371	405	413	420	408	404	393	392	383	384	376
6	380	380	380	380	380	374	368	362	349	333	322	332	353	377	410	409	392	392	406	384	385	383	383	391	375
7	363	377	380	380	380	379	372	363	349	328	323	323	335	352	367	383	388	393	394	392	393	388	381	381	369
8 q	381	381	381	381	379	376	366	353	340	329	331	329	333	347	366	377	392	394	388	391	391	388	386	384	369
9 q	382	379	375	377	379	377	365	349	333	323	323	328	338	345	359	371	371	381	390	398	399	396	388	384	367
10 q	383	383	383	383	384	384	373	360	345	332	328	327	341	351	369	387	403	410	414	409	401	386	371	370	374
11	370	370	373	374	373	370	362	348	336	323	312	319	326	335	350	384	416	439	443	428	402	381	373	369	370
12	359	354	313	347	367	363	352	337	323	309	319	323	327	346	373	384	399	415	409	401	403	393	376	377	361
13	377	371	371	373	367	353	344	344	353	350	341	348	337	336	354	380	406	446	445	447	438	370	348	327	372
14 d	303	205	213	219	266	342	364	341	331	322	302	342	388	367	359	352	365	395	402	427	405	385	381	367	339
15 d	374	362	319	240	324	374	367	359	340	298	323	346	376	415	424	390	370	375	383	403	421	383	359	272	358
16 d	284	157	112	248	284	325	302	323	333	333	295	299	327	406	430	396	387	402	415	428	405	381	295	358	*330*
17	360	352	340	355	370	367	350	350	345	320	329	345	341	338	385	431	428	439	455	434	410	390	371	370	374
18	367	359	355	354	351	350	355	348	332	333	335	335	340	347	392	410	442	527	493	452	403	381	373	377	380
19	353	350	349	339	349	352	327	327	327	309	302	306	314	347	341	349	380	410	410	400	402	391	378	370	353
20	371	368	370	370	363	355	349	338	341	346	345	341	349	367	384	392	381	381	384	390	403	397	396	388	369
21	384	385	382	384	381	374	360	345	341	338	331	334	345	345	360	380	392	399	402	415	417	412	399	392	375
22	378	376	384	388	392	388	381	376	363	343	324	320	328	331	351	366	381	399	413	417	409	399	399	410	376
23 d	407	405	370	224	311	359	374	383	366	341	316	312	323	343	363	393	401	401	414	414	414	403	399	394	368
24 d	393	392	402	398	392	374	358	308	161	305	340	324	317	332	355	347	377	375	382	381	373	370	377	359	354
25	355	356	338	356	358	351	340	320	301	287	279	300	334	337	366	392	403	410	428	439	415	399	385	368	359
26	373	377	356	363	343	349	363	376	349	325	316	305	302	330	356	390	392	456	442	428	405	396	389	388	369
27	377	375	367	374	366	374	375	354	348	330	320	335	334	341	352	370	398	433	417	414	399	392	385	381	371
28	384	381	370	381	389	386	375	361	341	327	321	319	348	397	440	423	435	450	435	418	395	392	385	385	385
29	396	392	395	392	396	389	383	379	366	358	345	340	347	377	452	589	614	569	523	452	439	385	370	367	*417*
30 q	366	359	360	363	363	356	346	337	325	310	300	306	323	335	342	356	373	387	392	386	388	386	384	380	355
31	381	378	377	374	375	374	367	353	338	333	341	345	359	384	393	424	435	435	423	458	461	403	377	376	386
Mean	370	362	354	354	363	366	359	351	336	327	*322*	327	339	355	375	391	403	*417*	416	412	404	389	378	373	368

MAGNETIC DECLINATION (WEST)

Mean values for periods of sixty minutes ending at exact hours, G.M.T.

26 LERWICK (D) — 11° + — MAY 1947

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′
1	9·6	13·6	11·0	9·5	13·1	16·2	8·6	6·3	4·1	4·4	5·6	7·3	13·1	15·1	14·1	10·5	6·9	6·4	6·3	8·6	13·2	15·2	13·9	13·1	10·2
2 q	9·5	9·8	8·5	6·1	3·3	1·9	1·3	0·7	1·4	5·1	9·1	11·9	13·4	13·9	13·1	11·1	10·3	10·3	10·0	9·8	10·0	10·7	10·6	10·2	8·4
3	9·6	10·4	9·3	9·5	5·9	5·7	5·2	4·7	4·4	6·8	8·6	13·4	17·1	17·2	16·1	12·9	10·7	9·6	9·8	10·6	10·8	10·6	10·8	10·8	10·7
4	10·1	9·3	8·2	6·5	4·6	2·2	0·5	0·7	3·5	8·4	13·1	15·2	17·3	16·6	15·8	12·9	10·6	8·9	9·6	9·0	9·6	11·8	11·7	10·8	9·5
5	10·1	11·0	12·6	11·3	5·6	3·0	2·7	0·8	4·7	5·9	11·2	15·6	18·9	18·7	16·9	15·2	11·5	8·3	10·3	11·7	12·2	12·1	11·3	11·6	10·6
6	10·6	9·8	9·1	7·7	5·8	5·3	5·4	3·9	5·2	9·5	14·1	17·1	18·9	18·4	16·4	12·2	9·3	9·5	12·2	13·1	13·5	13·1	12·3	15·1	11·1
7	11·6	9·6	9·1	7·8	5·6	5·1	3·7	3·7	4·0	7·1	11·3	16·0	18·3	17·8	15·3	13·1	11·6	10·6	10·2	10·7	11·4	10·5	10·5	10·2	10·2
8 q	9·5	9·0	8·2	6·7	5·0	2·9	2·1	1·9	2·9	6·1	9·3	12·7	14·6	15·7	15·3	14·2	12·4	10·4	9·5	10·2	11·3	11·3	11·8	10·9	9·3
9 q	10·2	9·5	9·3	6·7	4·7	2·6	1·0	1·4	1·5	5·6	9·1	13·0	16·6	17·4	16·5	15·1	12·2	10·5	11·0	11·9	12·0	10·3	11·3	11·3	9·6
10 q	10·9	9·9	8·7	7·3	5·1	2·8	-0·4	-0·1	0·0	3·1	10·2	16·0	19·2	20·9	19·1	15·8	12·8	11·3	12·3	12·9	13·1	11·5	9·9	8·2	10·0
11	5·5	5·8	5·1	3·1	0·5	-1·3	-2·3	-0·6	1·0	5·8	12·2	17·7	21·7	21·7	19·1	17·4	14·1	11·3	12·5	13·9	12·0	11·9	9·4	6·5	9·3
12	5·6	6·0	7·5	-1·1	-0·3	-1·1	-2·1	-0·2	3·4	9·3	12·5	16·6	19·3	20·4	19·8	15·5	13·3	12·0	11·5	12·5	12·9	10·9	10·0	13·0	9·5
13	4·9	4·4	5·5	4·3	2·5	-1·1	-3·2	-1·3	3·6	10·3	12·7	15·3	16·5	16·3	14·8	14·0	14·7	14·0	11·5	16·0	8·7	1·7	4·3	5·8	8·2
14 d	3·7	-5·6	-5·4	-1·9	-4·4	-5·1	-0·8	-2·1	7·5	12·1	14·5	17·8	19·6	17·9	17·7	12·9	11·0	7·9	7·5	9·5	10·5	9·2	13·1	11·2	7·4
15 d	9·9	8·2	8·7	2·8	1·6	-1·3	-3·6	-3·3	-0·1	10·0	13·5	16·2	17·9	16·5	15·9	11·1	12·9	13·3	13·3	11·3	3·4	10·7	8·8	3·7	8·4
16 d	-1·6	-11·5	0·8	-4·3	-2·7	7·1	4·6	-0·1	1·9	1·5	4·0	11·3	15·1	15·4	11·3	11·9	13·8	13·3	11·2	9·3	11·4	11·1	13·9	7·5	*6·5*
17	7·5	-0·3	0·0	3·2	0·5	0·8	1·7	2·9	3·6	6·1	11·2	15·0	17·6	16·9	15·9	16·9	14·3	14·6	13·6	12·2	12·0	12·8	11·3	10·3	9·2
18	10·0	9·8	3·0	1·6	3·7	3·5	2·6	-1·3	1·5	5·4	10·1	13·4	15·8	18·2	19·0	18·0	17·2	15·3	17·4	14·0	11·4	11·5	8·6	3·2	9·7
19	3·9	4·8	5·4	2·8	-0·4	-0·6	-2·5	-1·1	5·1	9·2	12·1	15·5	18·1	19·6	17·7	15·1	13·3	12·2	10·3	11·1	11·4	9·4	8·3	6·5	8·6
20	6·4	6·0	4·4	3·6	3·8	2·3	3·1	5·2	5·8	10·1	13·6	17·8	19·8	21·3	19·8	15·9	12·8	12·2	13·1	13·0	13·0	11·3	10·1	9·5	10·6
21	8·2	8·4	6·0	4·1	2·1	-0·1	-0·7	-2·1	-1·1	12·3	8·9	13·9	17·6	19·6	18·6	16·0	13·3	11·9	9·5	9·5	11·6	11·7	10·3	12·2	9·2
22	8·2	7·0	7·5	5·3	4·6	2·7	1·7	2·2	3·7	7·4	11·7	16·8	18·9	20·5	18·9	16·3	13·1	11·3	9·5	9·4	10·8	11·3	12·0	8·4	10·0
23 d	7·5	7·5	10·9	8·2	-16·0	-14·7	-3·9	-2·5	-4·0	1·7	7·6	12·5	16·0	18·6	19·3	20·3	18·4	13·1	10·5	9·4	11·3	11·0	10·2	9·7	7·6
24 d	8·4	7·5	7·5	7·2	7·0	8·2	7·9	5·1	-18·1	22·5	12·7	18·7	19·6	18·6	19·6	18·7	16·9	14·3	14·1	12·1	10·3	9·6	10·3	8·5	11·1
25	6·8	7·6	7·9	1·7	0·9	1·7	0·6	1·0	1·2	6·5	11·8	16·9	20·4	18·9	17·6	16·3	13·3	10·4	9·3	11·1	12·2	13·1	12·9	16·2	9·9
26	11·3	14·1	14·6	13·3	15·1	11·5	5·4	2·6	3·9	5·5	8·7	14·8	19·1	20·7	20·1	15·9	9·6	8·7	9·3	10·0	11·4	16·5	8·9	11·5	*11·8*
27	13·9	13·1	16·6	10·3	6·5	2·9	3·2	-2·1	5·4	4·6	10·7	13·5	17·4	18·2	15·5	14·3	12·6	12·0	6·9	8·6	9·8	11·4	11·1	12·2	10·4
28	10·8	9·7	7·8	4·0	2·4	0·6	-0·9	0·2	1·4	3·2	6·9	13·2	18·7	21·0	21·2	16·3	17·2	15·8	13·3	13·1	12·3	14·1	9·3	8·8	10·0
29	6·6	9·2	9·3	8·7	7·1	8·6	9·2	9·6	10·1	6·2	11·4	17·0	19·2	18·3	13·3	1·8	5·5	12·5	12·4	12·1	7·3	12·4	12·4	11·8	10·5
30 q	11·5	9·3	7·3	4·3	1·0	-2·1	-4·9	-5·2	-4·2	-2·1	3·2	8·6	12·5	13·5	13·4	12·3	11·7	10·2	9·3	9·3	9·0	9·4	10·1	9·9	6·6
31	9·3	8·5	6·7	5·3	3·7	1·3	-0·1	0·4	3·5	9·9	14·3	16·8	18·5	19·7	16·5	16·0	14·7	13·0	12·2	14·5	15·4	9·9	11·2	15·0	10·7
Mean	8·4	7·5	7·5	5·3	3·2	2·3	1·5	*1·0*	2·1	7·1	10·5	14·8	17·6	*18·2*	16·9	14·4	12·7	11·5	10·9	11·3	11·1	11·2	10·7	10·1	9·5

TERRESTRIAL MAGNETIC FORCE: VERTICAL COMPONENT

Mean values for periods of sixty minutes ending at exact hours, G.M.T.

27 LERWICK (V) — 46,000γ (0·46 C.G.S. unit) + — MAY 1947

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1	1000	989	974	983	999	963	964	970	985	988	987	986	985	1006	1014	1018	1019	1031	1032	1013	1000	995	1000	1000	996
2 q	1006	1007	1009	1011	1009	1008	1005	1000	994	994	988	984	983	982	983	988	993	994	1000	1000	1000	997	995	1000	997
3	1000	1001	1006	1005	1000	999	996	995	994	995	999	998	995	992	993	995	998	1005	1006	1001	998	996	994	996	998
4	999	1000	1001	1003	1004	1005	1001	995	986	982	977	980	983	988	994	1000	999	995	994	1009	1007	995	993	995	995
5	995	995	994	975	975	982	988	990	988	987	989	987	983	987	993	992	1010	1031	1026	1013	1006	998	999	995	995
6	998	1000	1003	1006	1006	1006	1000	994	993	987	982	977	978	993	1008	1037	1056	1045	1026	1023	1006	1000	999	988	1005
7	963	986	1001	1007	1007	1007	1007	1003	1002	999	993	994	993	996	1001	1001	1002	1002	1002	1002	1002	1001	1000	1000	999
8 q	1000	1001	1002	1007	1007	1006	1007	1001	993	989	986	989	987	988	991	995	996	1006	1007	1006	1002	1000	997	997	998
9 q	1000	1001	1002	1004	1007	1007	1010	1007	1001	991	981	970	966	975	983	995	1002	1004	1002	1001	1002	1003	1001	1000	995
10 q	1000	1001	1002	1007	1010	1009	1009	1007	999	990	983	982	983	988	996	1010	1025	1037	1035	1030	1024	1019	1014	1002	1007
11	1001	1000	1001	1002	1007	1007	1007	1001	994	987	984	978	979	989	999	1011	1033	1047	1043	1038	1035	1022	1022	1006	1008
12	989	966	901	941	977	1001	1014	1018	1011	1003	996	1001	1002	1003	1008	1015	1022	1026	1027	1019	1010	1006	1002	991	998
13	964	985	995	997	1002	1004	995	982	971	965	965	970	979	990	994	996	997	1008	1028	1027	1039	972	940	901	986
14 d	872	860	851	865	881	935	972	995	995	984	990	994	1046	1033	1022	1026	1023	1032	1033	1010	996	995	976	971	973
15 d	989	990	953	864	896	948	983	996	996	995	989	992	1001	1034	1058	1084	1046	1015	999	1003	1005	977	917	853	983
16 d	859	757	718	764	848	917	970	996	1005	1008	1021	1016	1026	1046	1098	1081	1039	1021	1026	1027	1018	995	915	916	*962*
17	947	924	941	954	967	991	1004	1010	1009	1016	1009	1011	1020	1028	1035	1035	1047	1045	1046	1037	1021	960	967	984	1000
18	977	960	944	972	990	986	979	994	998	993	985	984	991	993	998	1020	1034	1055	1034	1035	1035	1016	996	963	997
19	976	990	989	973	979	985	996	998	1003	1003	1002	998	992	996	1025	1022	1014	1008	1014	1015	1006	998	990	992	999
20	991	996	998	1003	1001	988	985	987	980	972	972	984	997	1006	1009	1022	1027	1019	1003	991	990	996	997	991	996
21	992	991	997	998	998	999	998	992	979	966	961	966	974	980	980	986	992	998	1004	999	997	997	998	985	989
22	974	986	997	1004	1009	1010	1009	1004	1003	997	987	979	979	991	997	1005	1010	1006	1009	1005	1004	999	992	975	997
23 d	987	992	978	845	849	917	912	936	969	974	979	981	979	981	980	981	987	997	1000	1004	992	993	993	991	967
24 d	987	995	992	992	996	991	976	986	1054	1012	978	977	1005	1010	1023	1021	1005	1015	1012	1011	1013	1014	1008	1005	1002
25	1009	1011	996	996	1017	1016	1017	1018	1018	1011	1005	1004	1015	1010	1006	1017	1023	1034	1036	1042	1037	1028	1011	997	1016
26	999	999	974	954	953	950	960	968	987	995	1004	1010	1009	1020	1032	1035	1055	1055	1053	1035	1023	996	936	956	998
27	976	986	974	984	967	993	994	1004	999	1012	1009	1004	1012	1023	1036	1041	1035	1022	1030	1028	1022	1012	1006	997	1007
28	986	996	999	998	1003	1009	1010	1006	1002	996	997	997	998	1004	1043	1091	1066	1041	1035	1022	1009	998	961	972	1010
29	973	985	999	1002	1004	1004	998	999	1004	1003	1016	1016	1015	1025	1045	1115	1180	1169	1144	1103	1091	1059	1035	1022	*1042*
30 q	1017	1019	1022	1022	1022	1017	1017	1015	1011	1011	1012	1010	1012	1017	1023	1022	1012	1005	998	1000	1004	1003	1004	1005	1013
31	1004	1005	1005	1009	1005	1004	1004	999	999	990	985	987	987	987	991	998	1028	1041	1042	1023	1035	1025	1004	979	1006
Mean	982	980	975	*973*	981	989	993	996	997	993	991	991	995	1002	1011	1021	1025	*1026*	1024	1019	1014	1002	989	981	998

DAILY EXTREMES OF TERRESTRIAL MAGNETIC ELEMENTS, MAGNETIC CHARACTER FIGURES AND TEMPERATURE IN MAGNET HOUSE

28 LERWICK — MAY 1947

	TERRESTRIAL MAGNETIC ELEMENTS												3-hr. range indices K	Sum of K indices	Magnetic character of day (0-2)	Temperature in magnet house 200 +
	Horizontal force					Declination			Vertical force							
	Maximum 14,000γ +		Minimum 14,000γ +		Range	Maximum 11° +	Minimum 11° +	Range	Maximum 46,000γ +		Minimum 46,000γ +		Range			
	h. m.	γ	γ	h. m.	γ	h. m. ′	′ h. m.	′	h. m.	γ	γ	h. m.	γ				°A.
1	17 49	430	323	10 10	107	05 24 22·2	1·6 08 18	20·6	18 15	1041	949	05 42	92	2,3,3,1,3,3,3,2	20	1	85·0
2 q	22 15	393	325	10 32	*68*	13 57 14·9	0·4 07 22	*14·5*	03 30	1013	980	13 52	33	1,2,1,1,1,1,0,1	8	0	85·2
3	16 45	408	316	11 05	92	13 42 18·6	3·2 08 21	15·4	18 20	1007	988	13 47	*19*	1.2.2.2.2.1.2.1	13	0	86·0
4	18 39	425	310	09 45	115	12 42 17·9	−0·1 07 08	18·0	19 39	1014	975	10 16	39	1,1,2,2,2,1,2,0	11	0	85·5
5	17 33	436	313	10 26	123	13 07 19·2	−0·1 07 48	19·3	17 57	1039	970	03 59	69	2,3,2,2,2,3,2,1	17	1	86·2
6	15 07	425	312	10 17	113	13 09 19·9	3·3 07 17	16·6	16 55	1058	976	11 10	82	1,1,1,2,3,3,3,2	16	1	86·3
7	17 31	399	318	11 01	81	12 30 19·0	2·4 07 00	16·6	04 30	1010	950	00 34	60	3,1,1,2,2,1,1,1	12	0	87·0
8 q	17 51	399	327	10 23	72	13 20 16·0	1·3 07 46	14·7	18 17	1008	983	10 10	25	0,1,2,1,2,1,1,0	8	0	87·0
9 q	20 35	403	320	09 48	83	13 24 17·8	0·1 06 23	17·7	06 51	1013	964	12 20	49	1,1,2,2,2,2,2,1	13	0	87·8
10 q	18 19	417	322	11 10	95	13 37 21·6	−2·2 06 47	23·8	17 28	1038	980	10 55	58	1,1,2,3,2,2,1,2	14	0	88·6
11	18 48	450	309	10 20	141	12 58 23·0	−3·3 06 13	26·3	17 35	1050	976	12 00	74	1,1,2,3,2,3,3,3	18	1	89·2
12	18 03	422	299	09 17	123	13 48 21·5	−3·0 06 09	24·5	18 28	1031	876	02 28	155	4,4,2,2,2,2,2,2	20	1	89·9
13	18 51	467	295	23 30	172	20 18 19·1	−5·1 21 10	24·2	20 42	1068	853	24 00	215	3,2,2,2,2,3,4,4	22	1	87·0
14 d	19 54	449	139	01 36	310	12 08 22·5	−19·1 02 42	41·6	12 40	1064	816	04 01	248	5,5,3,4,3,3,3,2	28	1	87·2
15 d	13 54	453	190	03 28	263	12 17 20·2	−16·1 23 55	36·3	15 35	1101	819	23 15	282	4,5,3,3,4,4,3,5	31	1	85·2
16 d	14 51	464	−6	02 15	*470*	22 36 20·1	−24·6 01 28	44·7	14 41	1113	*659*	02 43	*454*	6,5,4,3,4,4,2,5	33	2	85·2
17	18 13	464	311	09 34	153	12 28 19·3	−3·7 01 54	23·0	16 28	1052	921	01 09	131	3,3,2,3,3,2,3,3	22	1	85·2
18	17 55	576	327	08 12	249	18 28 23·9	−3·0 07 20	26·9	17 50	1089	937	02 07	152	3,2,2,2,3,5,5,3	25	1	85·2
19	17 15	417	291	11 10	126	13 38 20·6	−3·7 05 42	24·3	14 37	1032	964	00 02	68	2,2,2,2,3,3,1,2	17	1	85·1
20	20 53	407	331	11 40	76	13 36 21·9	1·7 05 39	20·2	16 16	1030	968	09 48	62	1,2,1,2,2,2,2,2	14	0	85·1
21	20 01	422	325	10 30	97	13 43 20·7	−4·1 07 15	24·8	17 56	1004	960	10 12	44	2,1,2,2,2,2,2,2	15	0	85·1
22	22 49	431	315	10 56	116	12 59 20·8	0·8 06 27	20·0	05 10	1011	971	23 29	40	2,1,1,2,2,2,1,3	14	0	85·3
23 d	18 20	425	136	03 33	289	15 48 22·3	−23·7 05 07	46·0	19 27	1007	781	03 51	226	4,5,4,2,3,2,2,1	23	1	85·4
24 d	06 47	420	69	08 29	351	09 11 *40·7*	*−41·0* 08 29	*81·7*	08 39	1113	954	06 48	159	3,3,6,5,4,3,2,3	29	2	85·8
25	19 14	454	270	10 27	184	12 32 22·5	−1·7 04 11	24·2	19 36	1048	979	02 47	69	3,2,3,3,3,2,3,3	22	1	85·5
26	17 18	468	279	12 05	189	14 02 23·3	−0·3 10 11	23·6	17 52	1066	916	22 34	150	2,3,3,3,3,4,3,4	25	1	86·0
27	17 34	454	310	10 33	144	02 15 22·0	−5·4 07 33	27·4	14 57	1049	957	04 22	92	3,3,3,2,2,4,2,2	21	1	86·2
28	17 11	486	306	10 55	180	14 50 25·5	−2·3 06 27	27·8	15 39	1102	938	22 27	164	2,2,2,3,4,4,3,3	23	1	85·7
29	15 33	*641*	331	11 35	310	12 24 20·3	−0·8 15 20	21·1	16 58	*1203*	967	00 00	236	2,2,2,3,4,5,4,3	25	1	86·0
30 q	18 18	396	297	10 16	99	14 18 14·2	−6·3 07 14	20·5	14 20	1026	998	18 20	28	2,2,1,2,1,2,1,1	12	0	86·1
31	20 11	480	316	09 40	164	13 35 20·8	−1·8 08 17	22·6	20 45	1057	949	24 00	108	1,2,2,2,3,3,4,3	20	1	87·0
Mean	− −	444	278	− −	166	− − 21·0	−5·1 − −	26·1	− −	1050	931	− −	119	−	−	0·71	86·2

q denotes an international quiet day and d an international disturbed day.

TERRESTRIAL MAGNETIC FORCE: HORIZONTAL COMPONENT

Mean values for periods of sixty minutes ending at exact hours, G.M.T.

29 LERWICK (H) — 14,000γ (0·14 C.G.S. unit) + — JUNE 1947

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1 d	90	224	182	245	225	267	297	295	289	277	271	285	311	330	372	389	397	401	398	382	371	372	374	377	309
2 q	379	378	381	382	379	371	356	341	329	323	323	313	317	330	347	364	386	393	394	391	393	393	397	385	364
3	380	370	363	336	318	360	376	368	353	340	335	344	353	376	375	384	394	398	400	408	408	397	393	396	372
4	397	392	390	396	393	384	372	359	346	349	357	353	371	379	392	397	425	437	418	411	407	397	389	390	388
5 d	390	392	392	393	389	386	379	342	306	354	378	379	393	400	396	400	411	472	480	465	463	423	385	268	393
6	75	316	358	359	356	351	335	327	323	321	323	331	347	350	359	360	373	382	392	386	389	390	336	364	342
7	360	360	351	335	335	354	350	335	334	319	331	350	375	367	357	412	441	453	422	421	422	383	294	252	363
8	203	133	275	245	267	317	333	328	333	328	324	326	359	382	415	421	412	472	443	432	393	382	376	361	344
9	346	352	311	323	335	325	327	335	335	324	314	321	338	357	374	378	396	437	426	417	407	394	347	346	357
10	358	353	346	349	331	351	354	354	343	317	306	322	346	375	379	372	380	391	404	423	426	394	384	371	364
11	365	372	368	368	358	353	360	343	333	334	329	325	334	368	386	391	390	395	424	408	397	385	380	378	369
12 q	379	379	383	381	372	355	345	357	355	350	347	350	348	361	386	398	397	405	427	426	404	398	378	346	376
13	358	365	362	367	377	369	359	341	335	342	328	322	313	336	377	383	398	424	455	429	411	414	365	234	365
14 d	−47	115	143	−111	224	309	286	272	278	271	278	326	340	361	365	368	382	440	465	431	444	394	381	369	*295*
15	351	354	326	335	362	361	347	336	332	322	324	305	350	345	361	390	397	394	401	394	398	391	383	376	360
16 q	379	379	373	376	379	373	363	356	347	335	331	329	350	365	369	379	382	391	403	398	398	394	397	402	373
17 d	397	393	387	354	309	336	347	325	289	318	320	318	346	369	403	441	468	583	598	498	433	404	383	377	391
18	372	372	375	376	365	350	336	333	327	329	332	339	352	374	372	394	398	390	412	431	414	415	404	384	373
19	372	362	364	349	322	368	378	370	349	333	328	346	350	374	402	422	444	419	425	414	410	403	396	388	379
20	382	379	374	378	379	378	371	360	357	344	335	321	346	371	374	403	407	426	436	436	420	415	404	397	383
21	394	393	398	405	408	400	392	368	348	310	296	320	346	364	371	384	397	428	414	407	422	411	400	389	382
22	389	388	393	385	397	400	382	375	352	342	333	342	359	385	390	409	440	487	451	446	440	436	406	396	*397*
23	403	361	381	394	397	390	374	372	350	332	336	357	368	378	436	485	470	433	414	389	390	396	395	393	391
24	397	394	389	380	390	384	368	352	339	341	336	356	378	386	397	394	412	446	429	443	433	422	407	400	391
25 d	400	390	351	339	367	327	307	319	313	326	326	313	379	382	364	407	425	433	438	438	426	408	384	368	372
26	356	360	363	368	365	350	351	353	342	334	344	343	343	400	407	419	416	439	420	408	393	395	375	350	375
27 q	330	362	376	386	389	386	377	364	357	350	346	346	354	370	380	389	386	393	407	414	406	400	389	389	377
28	382	380	380	382	384	377	374	360	341	328	331	332	335	363	372	389	397	407	432	411	406	396	390	393	377
29 q	392	389	389	386	384	372	364	360	358	343	338	345	342	350	357	368	386	400	407	413	411	408	400	397	377
30	382	363	375	376	375	375	349	335	350	345	339	346	350	366	371	382	404	429	418	429	415	407	401	388	378
Mean	337	351	353	345	354	359	354	345	335	329	*328*	330	350	367	380	396	407	*430*	428	420	412	401	383	367	369

MAGNETIC DECLINATION (WEST)

Mean values for periods of sixty minutes ending at exact hours, G.M.T.

30 LERWICK (D) — 11° + — JUNE 1947

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′
1 d	19·2	−2·3	−2·6	−3·4	−5·7	−3·0	0·5	−8·7	−3·6	7·3	10·7	13·4	16·5	16·7	14·9	12·7	10·0	7·1	5·9	7·5	9·7	11·3	11·3	11·0	6·5
2 q	10·4	9·2	7·3	4·8	2·2	−0·5	−2·1	−0·9	1·1	4·3	7·9	11·9	16·2	18·1	18·7	15·7	11·8	8·0	5·5	6·5	8·6	9·6	11·6	11·9	8·2
3	13·1	12·2	13·3	15·1	5·5	1·7	−2·9	−3·2	0·3	6·1	11·6	16·9	20·9	20·7	18·9	14·5	12·2	11·3	12·0	11·4	11·4	11·2	11·3	10·6	10·7
4	10·5	9·8	7·2	4·2	2·9	2·6	1·3	2·8	6·2	11·4	14·4	16·6	17·4	17·6	15·9	12·7	12·2	9·4	10·9	13·1	13·1	12·4	10·9	11·0	10·3
5 d	10·1	9·7	7·5	4·4	3·9	3·8	1·9	−1·3	12·4	20·1	25·1	22·6	20·7	20·4	18·2	19·8	16·9	20·1	21·8	17·0	16·4	17·7	11·3	6·1	13·6
6	−9·5	7·1	3·4	1·1	−1·0	−3·2	−3·5	−1·5	0·5	4·4	9·6	13·1	15·2	15·6	14·7	13·7	12·7	12·0	11·7	10·3	7·9	6·0	7·9	3·6	6·3
7	4·4	3·5	3·7	4·1	3·6	−0·7	−2·5	−0·9	1·8	5·5	12·0	17·9	20·5	20·5	21·7	20·1	15·1	12·8	12·3	13·1	13·4	7·3	4·0	−12·5	8·4
8	−12·1	−10·6	−2·3	−7·7	1·9	−0·3	2·4	1·8	−0·3	−0·6	1·6	6·2	11·9	13·7	17·9	16·8	14·6	18·5	15·6	10·2	12·5	13·8	7·9	2·8	5·7
9	3·5	6·8	11·9	7·2	−1·1	3·7	5·0	1·6	0·7	3·7	6·0	9·3	13·1	15·1	15·0	15·3	15·2	14·3	10·3	13·8	13·6	10·2	10·3	6·4	8·8
10	6·6	4·6	−0·1	−4·7	0·8	1·8	−2·6	−0·8	0·5	2·2	8·3	10·2	13·3	17·1	16·3	15·9	14·7	13·6	14·1	13·2	10·7	10·1	10·0	10·1	7·7
11	10·2	6·1	3·0	4·6	2·1	0·3	0·0	−0·5	5·0	5·1	8·5	13·1	15·1	17·2	16·9	15·9	14·4	14·0	14·5	11·9	11·7	11·6	10·5	9·2	9·2
12 q	8·4	9·0	7·9	6·3	2·7	−0·2	2·3	2·2	2·1	6·0	9·6	12·3	15·1	16·7	15·8	15·1	14·0	14·5	15·1	14·5	11·6	10·5	7·9	3·2	9·3
13	2·7	5·7	3·9	3·1	2·8	−0·4	−2·1	0·4	4·6	4·1	6·1	10·1	12·5	15·9	18·5	17·4	15·1	13·3	14·7	9·2	11·0	15·4	10·0	−17·6	7·3
14 d	−4·9	−7·7	−7·4	1·3	−14·2	−10·2	−7·5	−4·1	−1·6	−0·8	17·7	15·8	15·9	14·8	15·3	14·7	12·5	10·0	8·1	13·0	12·8	13·5	12·2	12·9	*5·5*
15	4·8	−0·1	−1·0	2·0	−3·9	−8·4	−6·4	−5·6	−1·7	1·8	6·3	13·0	15·3	18·2	19·3	16·8	17·4	16·9	11·7	10·3	10·8	10·5	9·5	7·9	6·9
16 q	7·1	5·2	4·4	3·5	1·9	0·8	−0·3	−0·4	1·2	4·1	9·3	13·6	18·2	18·8	17·4	15·6	13·5	12·0	12·1	11·3	10·6	9·9	10·1	11·3	8·8
17 d	9·6	8·9	9·7	16·1	8·7	10·0	1·2	0·3	3·8	13·1	13·2	17·4	16·8	18·0	21·7	24·1	22·7	32·1	22·4	16·9	15·7	12·9	12·1	10·1	*14·1*
18	6·7	5·2	3·7	3·6	4·6	5·1	6·5	8·0	7·8	11·5	14·0	20·0	22·2	23·3	21·1	16·9	15·8	13·9	13·6	15·4	12·6	12·2	3·5	7·2	11·4
19	10·3	8·5	3·4	3·7	4·4	−4·7	−2·5	−1·1	0·0	5·7	11·0	13·4	17·7	20·2	20·8	20·5	15·7	10·1	10·1	12·7	12·1	9·7	8·5	3·8	8·9
20	5·9	8·2	7·3	8·4	6·5	5·1	4·8	2·2	3·8	7·3	9·8	13·8	15·5	16·5	17·9	17·7	15·4	14·4	11·4	9·5	9·8	11·1	11·7	11·9	10·2
21	10·4	11·8	10·2	8·1	5·5	4·0	2·0	0·5	−0·9	1·4	6·7	14·2	18·9	20·0	19·2	16·8	13·1	11·1	10·1	12·0	12·2	11·3	13·4	11·3	10·1
22	9·3	11·3	6·4	7·3	−0·5	−3·4	−3·6	−2·2	−0·9	5·5	9·2	14·3	19·6	20·0	18·1	15·5	13·1	13·0	12·0	11·3	11·9	14·8	11·1	12·2	9·4
23	14·4	15·8	10·3	3·8	3·7	6·0	6·5	7·8	9·0	11·3	15·0	18·1	19·2	18·4	19·1	14·9	13·5	14·2	13·1	10·3	10·1	11·3	10·8	12·4	12·0
24	12·9	12·0	12·2	8·2	3·2	3·0	5·2	5·4	5·5	7·9	11·4	12·3	14·9	14·8	15·1	15·2	15·8	14·9	15·1	14·7	13·6	11·3	11·0	13·0	11·2
25 d	12·2	11·7	11·3	10·9	2·9	10·0	14·3	10·1	4·8	7·3	7·2	12·7	13·4	14·4	11·9	11·1	11·1	11·9	12·1	12·1	13·6	12·0	10·3	10·2	10·8
26	7·9	4·1	3·1	3·2	5·5	8·3	10·1	7·3	4·4	7·2	6·1	11·8	14·9	16·7	15·1	13·5	11·1	13·0	12·1	13·8	14·2	14·6	13·3	12·2	10·1
27 q	9·2	7·9	6·7	2·6	0·2	−0·4	−0·8	0·5	0·9	2·9	5·7	11·3	14·1	16·4	16·0	14·8	12·0	10·8	10·0	10·9	11·0	11·2	11·3	11·8	8·2
28	11·1	9·3	6·7	5·2	3·7	2·7	0·9	1·4	3·6	8·6	9·9	14·1	18·6	19·9	17·4	15·9	13·0	10·1	9·0	10·3	11·3	10·6	9·7	10·3	9·7
29 q	11·6	11·0	9·5	5·5	2·7	1·5	1·8	−0·1	−0·4	3·7	7·5	12·4	14·8	15·2	14·9	13·1	11·6	9·4	9·0	9·4	9·9	10·1	11·4	13·6	8·7
30	10·3	6·5	5·5	7·0	6·7	6·5	7·9	10·1	8·7	9·0	12·1	15·1	16·0	17·1	15·5	13·7	11·1	10·1	8·2	9·8	12·8	13·7	14·0	16·4	11·0
Mean	7·5	6·7	5·5	4·7	2·1	1·4	1·3	*1·0*	2·6	6·2	10·1	13·9	16·5	*17·6*	17·3	15·9	13·9	13·2	12·1	11·9	11·9	11·6	10·3	8·1	9·3

TERRESTRIAL MAGNETIC FORCE: VERTICAL COMPONENT

Mean values for periods of sixty minutes ending at exact hours, G.M.T.

31 LERWICK (V) — 46,000γ (0·46 C.G.S. unit) + — JUNE 1947

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1 d	853	794	727	725	791	851	907	944	949	968	986	999	1004	1013	1024	1040	1047	1052	1042	1023	1010	1000	999	1004	948
2 q	1007	1010	1012	1013	1014	1016	1021	1019	1010	998	999	1003	1001	1002	1005	1011	1017	1016	1015	1012	1009	1005	992	987	1008
3	991	982	959	947	911	937	958	983	991	992	990	985	986	989	997	1004	1013	1016	1016	1011	1005	1004	1003	998	986
4	998	1003	1009	1010	1012	1006	1010	1012	1005	997	992	992	990	991	989	998	1004	1024	1041	1023	1010	1008	1005	1002	1005
5 d	1002	1001	1004	1006	1008	1000	996	994	992	965	961	974	996	1004	1013	1018	1010	1002	1012	1034	1048	1028	992	992	1002
6	909	945	1010	1028	1026	1024	1024	1019	1006	997	992	991	992	995	1000	1006	1010	1012	1010	1010	1011	1015	1008	991	1001
7	981	978	966	958	944	962	979	985	988	992	980	980	991	1011	1009	1012	1048	1066	1055	1028	1015	968	893	863	985
8	828	797	810	821	868	930	976	992	999	1013	1016	1018	1032	1063	1053	1072	1078	1058	1052	1042	1029	1016	1005	987	981
9	972	970	943	906	949	978	986	993	1008	1011	1017	1023	1033	1040	1048	1042	1034	1036	1053	1030	1020	1022	1016	963	1004
10	960	959	930	946	962	954	981	993	1007	1010	1007	1001	1002	1010	1023	1029	1022	1016	1016	1012	1016	1016	1004	1000	995
11	985	962	986	997	996	987	979	986	987	988	994	994	992	999	1005	1010	1009	1000	999	1016	1017	1010	1004	999	996
12 q	999	998	997	1002	1004	1009	1002	988	992	999	996	992	993	997	1004	1012	1018	1008	999	1011	1022	1012	1007	981	1002
13	969	972	966	967	980	992	1000	998	987	984	984	979	980	987	999	1017	1022	1015	1005	1022	1011	990	949	821	983
14 d	785	768	748	740	797	893	924	932	947	992	989	992	1010	1029	1052	1045	1042	1055	1067	1040	1024	1020	1011	991	954
15	966	968	980	962	959	986	992	995	996	991	992	997	999	1012	1017	1023	1025	1012	1012	1009	1003	999	998	1001	996
16 q	1000	1004	1008	1005	1005	1004	999	998	997	995	992	987	980	986	989	993	1004	1003	999	999	997	998	999	997	997
17 d	999	1003	999	962	924	888	913	955	966	950	961	987	993	1005	1029	1095	1158	1141	1120	1056	1034	1035	1022	1016	1009
18	1015	1016	1015	1011	1001	995	991	979	973	983	992	1004	1023	1020	1020	1024	1041	1040	1023	1023	1028	1020	991	967	1008
19	959	967	974	973	941	924	960	981	993	1007	1010	1003	999	999	1002	1010	1035	1064	1056	1029	1021	1016	999	961	995
20	973	989	992	1004	1004	993	992	999	1007	1011	1011	1003	998	1016	1025	1023	1047	1047	1047	1046	1029	1023	1011	1004	1012
21	1005	1005	1004	1006	1011	1016	1012	1015	1014	1013	996	983	986	997	1004	1010	1021	1033	1041	1029	1011	1011	1004	979	1009
22	984	980	980	976	986	1001	1009	1010	1011	1003	992	988	992	991	1001	1016	1035	1053	1072	1060	1036	1012	1012	998	1008
23	985	962	967	981	997	998	997	988	998	1003	992	987	997	999	1004	1034	1072	1069	1038	1022	1016	1010	1005	1004	1005
24	1004	1004	1008	996	999	1005	1000	994	1003	998	997	986	994	1005	1012	1028	1024	1029	1038	1047	1048	1034	1023	1005	1012
25 d	998	1003	970	910	887	949	929	942	972	986	1013	1012	1010	1040	1048	1047	1065	1065	1048	1046	1034	1034	1026	1021	1002
26	1006	1010	1014	1005	994	973	947	950	973	987	1004	1037	1035	1032	1052	1084	1118	1078	1066	1047	1032	1016	998	996	*1019*
27 q	979	968	974	999	1010	1010	1010	1009	1009	1016	1016	1012	1012	1010	1021	1028	1032	1029	1026	1023	1017	1010	1010	1005	1010
28	1005	1005	1009	1010	1008	1004	1004	1006	1004	1005	1010	1013	1010	1000	1000	1002	1010	1016	1018	1023	1015	1008	1009	1005	1008
29 q	1005	1007	1008	1012	1011	1011	1008	1007	1004	1004	1005	1004	999	998	999	1003	1004	1005	1004	1004	1005	1005	1005	1000	1005
30	975	956	988	998	986	988	999	997	991	1004	1004	993	1004	1010	1016	1022	1029	1041	1056	1042	1024	1011	1009	999	1006
Mean	970	966	965	*963*	966	976	983	989	993	995	996	997	1001	1008	1015	1025	1036	*1037*	1035	1027	1020	1012	1000	985	998

DAILY EXTREMES OF TERRESTRIAL MAGNETIC ELEMENTS, MAGNETIC CHARACTER FIGURES AND TEMPERATURE IN MAGNET HOUSE

32 LERWICK — JUNE 1947

	TERRESTRIAL MAGNETIC ELEMENTS																3-hr. range indices K	Sum of K indices	Magnetic character of day (0-2)	Temperature in magnet house 200 +
	Horizontal force					Declination					Vertical force									
	Maximum 14,000γ +		Minimum 14,000γ +		Range	Maximum 11° +		Minimum 11° +		Range	Maximum 46,000γ +		Minimum 46,000γ +		Range					
	h. m.	γ	γ	h. m.	γ	h. m.	′	′	h. m.	′	h. m.	γ	γ	h. m.	γ					°A.
1 d	18 44	407	-217	00 39	624	00 34	41·4	-16·4	01 02	57·8	17 55	1054	679	03 00	375	7,5,4,2,3,2,3,2	28	1	87·0
2 q	22 29	404	310	11 20	94	14 41	19·4	-3·0	06 53	22·4	07 05	1023	984	22 55	39	1,2,2,2,2,2,1,2	14	0	85·8
3	20 40	415	299	4 12	116	12 58	22·3	-5·7	06 54	28·0	18 18	1020	894	04 29	126	3,3,3,3,2,2,2,1	19	1	85·8
4	17 02	451	339	8 55	112	12 04	18·0	0·2	06 47	17·8	18 15	1043	986	13 55	57	2,1,2,2,1,3,2,1	14	0	85·4
5 d	18 10	490	21	23 56	469	10 47	32·1	-13·5	24 00	45·6	20 31	1059	954	10 21	105	1,2,5,3,3,4,3,6	27	1	87·5
6	18 50	400	−44	00 29	444	12 54	16·3	-39·1	00 11	55·4	04 14	1033	839	00 27	194	7,2,2,2,2,2,2,2	21	1	87·0
7	17 23	469	216	23 28	253	14 34	22·5	-15·7	23 55	38·2	17 44	1072	855	23 57	217	2,3,2,3,3,3,3,5	24	1	88·0
8	17 40	494	33	1 25	461	17 47	24·8	-23·9	03 11	48·7	15 59	1084	759	01 32	325	6,5,3,2,3,4,4,3	30	1	87·8
9	17 11	451	289	2 55	162	17 22	18·4	-4·9	08 06	23·3	18 15	1064	892	03 25	172	3,3,3,2,2,3,3,4	23	1	88·0
10	20 48	437	296	10 20	141	13 48	18·5	-5·9	03 35	24·4	15 20	1033	924	02 23	109	3,3,3,2,3,2,3,2	21	1	87·6
11	18 20	430	318	10 04	112	13 23	18·8	-2·7	06 56	21·5	19 52	1022	954	01 05	68	3,2,2,2,3,2,2,1	17	0	88·2
12 q	19 00	434	336	6 21	98	13 55	17·6	-1·9	05 33	19·5	20 11	1023	956	24 00	67	1,2,2,1,2,2,2,3	15	0	88·8
13	17 55	484	138	24 00	346	18 13	20·8	-24·0	24 00	44·8	19 13	1024	786	24 00	238	2,2,2,2,3,4,3,6	24	1	88·2
14 d	17 35	506	*-529*	3 43	*1035*	03 47	*43·9*	*-55·1*	03 36	*99·0*	17 56	1083	*607*	02 56	*476*	8,8,4,4,3,4,4,3	38	2	88·4
15	16 06	412	286	11 07	126	14 01	19·9	-9·9	05 38	29·8	15 48	1029	948	00 58	81	3,3,2,3,2,3,2,2	20	1	88·8
16 q	23 09	413	324	11 32	89	12 48	20·6	-1·5	07 44	22·1	02 32	1009	975	12 49	34	1,1,1,2,2,2,2,2	13	0	88·4
17 d	18 26	*671*	275	8 40	396	18 01	41·3	-3·6	07 38	44·9	16 29	*1172*	872	05 40	300	2,4,4,3,4,5,6,3	31	2	88·7
18	19 23	438	318	11 40	120	13 06	24·0	-4·2	22 28	28·2	17 00	1050	957	24 00	93	1,3,2,3,2,2,3,3	19	1	89·0
19	15 57	451	310	4 33	141	14 01	22·7	-6·8	05 08	29·5	17 50	1078	899	05 05	179	3,3,3,2,3,3,3,3	23	1	89·0
20	18 45	451	317	11 19	134	14 40	19·2	0·0	08 05	19·2	17 00	1055	960	00 00	95	2,1,2,2,3,3,2,2	27	0	88·2
21	17 26	444	285	10 20	159	13 44	20·7	-2·5	08 57	23·2	18 04	1046	968	23 36	78	1,1,3,3,2,3,2,3	18	0	88·0
22	17 41	519	321	10 29	198	13 47	21·6	-5·9	06 20	27·5	18 25	1082	967	02 00	115	2,3,2,3,2,4,3,3	22	1	88·1
23	16 07	512	324	9 24	188	01 19	21·8	1·7	04 14	20·1	17 03	1085	937	01 48	148	3,2,3,3,4,4,3,1	23	1	88·9
24	17 39	465	328	10 33	137	17 50	17·0	1·9	05 03	15·1	20 11	1058	984	11 24	74	2,3,2,2,2,3,2,3	19	1	88·9
25 d	18 48	454	285	6 05	169	06 16	19·8	0·2	04 13	19·6	16 45	1083	855	03 58	228	3,4,4,3,4,3,2,3	26	1	88·7
26	17 30	386	324	9 17	*62*	13 50	18·3	1·7	03 25	16·6	16 20	1129	935	06 50	194	2,3,3,3,4,3,3,3	24	1	88·4
27 q	19 30	422	310	00 25	112	13 51	17·0	-1·2	05 26	18·2	16 28	1034	961	01 05	73	3,1,1,2,2,2,2,1	14	0	89·1
28	18 02	444	314	12 00	130	13 17	21·0	-0·4	04 30	21·4	19 13	1027	997	14 47	30	2,2,2,2,3,2,2,1	16	0	88·5
29 q	19 12	418	329	10 04	89	13 35	16·0	-1·2	07 29	17·2	03 49	1016	995	24 00	*21*	2,2,1,2,1,2,2,2	14	0	89·0
30	17 42	437	319	7 09	118	12 59	18·4	3·9	05 00	*14·5*	18 27	1063	940	01 05	123	3,2,3,2,2,3,3,2	20	1	89·0
Mean	− −	454	226	− −	228	− −	22·5	−8·0	− −	30·5	− −	1055	907	− −	148	-	-	0·73	88·1

q denotes an international quiet day and d an international disturbed day.

TERRESTRIAL MAGNETIC FORCE: HORIZONTAL COMPONENT

Mean values for periods of sixty minutes ending at exact hours, G.M.T.

33 LERWICK (H) — 14,000γ (0·14 C.G.S. unit) + — JULY 1947

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1	385	379	376	382	389	382	381	372	363	351	335	328	335	338	357	385	415	454	440	404	405	414	405	386	382
2	343	356	379	381	356	382	378	354	342	331	321	329	343	371	371	429	470	426	422	411	410	414	397	382	379
3 q	369	374	374	378	378	367	349	335	324	329	332	328	342	357	360	385	376	403	411	407	405	398	393	385	369
4 q	377	374	375	381	382	378	364	354	342	330	321	318	331	346	367	379	386	390	392	396	397	396	393	386	369
5 q	392	385	380	387	385	379	366	352	341	333	330	332	342	357	374	389	400	403	411	414	409	400	386	382	376
6	385	378	382	382	388	385	378	359	336	322	326	321	347	360	372	371	418	422	425	411	407	395	390	389	377
7	389	380	372	371	378	375	362	350	342	332	332	335	341	360	374	382	382	407	429	443	428	411	393	374	377
8	372	378	382	382	377	378	380	364	353	337	328	332	343	361	378	397	401	412	451	426	414	400	393	390	380
9	379	373	375	381	382	381	374	363	345	328	317	314	325	348	368	382	400	400	423	426	423	400	384	385	374
10	382	360	350	346	374	378	367	352	331	324	324	335	342	357	381	415	436	411	409	418	422	402	382	384	374
11	375	378	379	378	375	367	364	364	354	345	340	336	340	348	368	412	415	426	431	436	414	411	368	368	371
12	367	363	371	356	346	368	371	362	351	336	320	318	349	370	373	374	388	420	440	406	402	388	380	376	371
13	375	356	356	371	371	367	363	353	331	320	312	312	328	375	378	420	440	462	443	407	402	393	389	377	375
14 q	380	379	378	378	377	369	353	342	336	334	332	333	344	360	368	389	430	432	433	437	415	394	384	374	377
15	363	374	368	354	365	361	365	356	343	333	326	322	339	357	372	382	420	414	423	408	394	385	379	382	370
16	380	368	376	375	375	379	372	361	340	327	321	322	337	353	362	381	394	393	390	389	390	394	396	398	370
17 d	402	398	396	395	395	388	380	370	357	340	335	340	345	364	378	402	442	467	684	723	698	465	487	173	*422*
18 d	12	36	335	330	424	423	380	362	352	340	327	310	331	478	691	673	709	662	561	428	377	352	308	308	396
19 d	244	36	57	240	343	350	309	338	331	316	311	345	342	358	353	396	437	488	457	421	423	384	371	371	*334*
20 d	369	341	342	302	301	354	327	289	339	331	309	298	339	376	410	479	454	418	437	431	419	385	363	353	365
21	357	362	356	340	353	363	342	331	323	316	317	327	325	331	361	384	392	406	421	425	415	392	380	374	362
22	376	372	358	361	375	372	365	356	332	316	321	326	325	371	385	371	395	423	430	450	438	404	386	368	374
23 d	361	372	361	357	343	372	366	350	329	304	308	307	339	397	346	393	375	408	404	411	421	406	379	375	366
24	375	370	371	357	339	374	368	362	347	332	321	319	343	336	374	408	437	407	397	402	411	401	393	387	372
25	383	369	351	362	379	377	370	344	329	319	329	336	325	384	339	395	376	437	420	434	420	398	390	381	373
26	373	354	343	293	315	365	347	334	348	339	329	343	336	329	394	378	423	430	415	419	410	395	392	371	366
27	373	374	374	362	350	332	316	330	342	345	343	323	334	358	382	392	395	395	421	399	402	382	378	379	366
28	381	377	375	377	377	370	361	359	341	327	319	313	329	377	395	411	409	413	430	403	388	384	377	373	374
29	366	359	362	345	358	343	342	342	328	305	299	299	317	352	372	395	402	391	403	392	374	369	368	369	356
30 q	372	375	378	381	386	381	375	363	346	339	333	333	339	353	368	385	393	393	404	403	395	397	389	382	373
31	383	377	370	374	375	374	378	368	353	342	328	333	345	334	359	393	418	425	422	411	418	408	399	364	377
Mean	359	349	358	360	368	372	362	351	342	330	*324*	325	337	362	382	404	420	427	*433*	426	418	397	386	369	373

MAGNETIC DECLINATION (WEST)

Mean values for periods of sixty minutes ending at exact hours, G.M.T.

34 LERWICK (D) — 11° + — JULY 1947

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′
1	12·8	12·6	7·0	2·7	3·2	1·7	1·6	0·0	2·1	4·6	7·2	12·0	15·4	17·6	17·7	17·0	15·2	13·7	8·9	9·9	11·0	13·2	12·3	8·0	9·5
2	5·5	5·6	5·5	7·2	6·3	-2·2	-2·1	3·8	6·7	5·9	9·0	14·9	17·1	19·0	19·0	18·0	12·3	9·5	7·3	11·6	13·1	14·6	10·6	9·8	9·5
3 q	8·5	6·6	4·6	2·7	1·4	-1·1	0·5	4·9	3·7	6·6	8·8	11·1	14·4	15·4	14·2	11·6	9·9	10·8	10·3	10·4	10·5	9·1	11·4	10·8	8·2
4 q	9·4	8·5	5·6	3·9	2·6	0·6	-1·8	-1·3	0·9	3·4	7·6	13·1	17·8	19·0	19·0	16·8	14·4	12·3	10·6	10·0	10·1	9·6	9·5	9·6	8·8
5 q	8·4	7·6	5·8	5·4	3·6	0·7	-1·7	-1·2	0·1	3·8	8·7	13·2	16·9	18·0	17·1	18·0	16·3	13·9	13·5	12·2	11·9	11·7	8·4	7·7	9·2
6	7·9	9·3	6·6	2·4	2·3	1·8	0·0	-0·8	2·8	6·4	8·2	4·6	16·9	19·0	19·0	17·9	18·0	15·2	14·7	13·2	12·4	10·4	9·5	8·4	9·5
7	1·8	2·3	1·3	2·3	0·0	-3·2	-1·7	-1·3	0·0	2·8	6·8	11·5	16·9	19·9	21·5	20·1	16·1	16·4	16·3	14·2	11·4	11·2	13·1	7·0	8·6
8	5·8	2·9	3·8	2·9	1·6	-2·0	0·0	-0·1	4·8	5·4	5·8	10·1	15·2	18·3	19·0	18·0	15·4	14·4	10·9	10·5	12·3	12·5	9·4	5·4	8·4
9	3·8	4·3	1·6	2·0	0·3	-3·7	-4·6	-1·4	-1·8	1·8	6·8	12·0	16·0	17·6	18·7	18·5	16·8	15·0	15·2	14·2	11·2	9·6	10·1	10·7	8·1
10	2·1	7·6	1·7	3·8	-0·8	-1·4	0·1	0·9	3·4	5·2	6·7	11·2	15·2	17·0	16·5	17·5	14·9	13·2	13·3	13·8	13·2	10·3	5·6	10·2	8·4
11	6·0	1·5	2·7	1·8	2·1	-1·3	0·9	-1·3	0·0	2·5	7·5	11·5	14·7	15·2	16·5	18·3	16·0	12·6	10·7	12·5	11·4	11·4	8·2	7·3	7·9
12	4·1	5·6	5·9	7·4	6·5	2·2	0·0	2·1	2·5	3·1	7·7	13·2	17·0	19·6	18·8	15·4	13·2	12·1	11·1	10·1	10·6	10·3	10·4	9·9	9·1
13	4·7	-1·0	0·0	0·0	0·4	-1·0	-1·9	-2·0	-0·3	3·8	8·8	12·3	15·4	19·7	18·0	17·1	14·7	11·7	11·2	11·3	12·1	10·4	6·9	8·5	7·5
14 q	9·4	9·5	6·6	4·4	2·9	1·6	1·2	-0·2	-0·6	2·8	7·3	12·5	16·7	17·5	15·8	16·4	16·1	12·5	11·8	12·7	13·9	12·7	11·0	8·1	9·3
15	8·0	4·7	2·0	-0·3	0·8	2·0	1·2	1·8	0·9	3·3	8·1	12·1	15·9	16·4	15·3	14·7	12·7	9·6	10·7	9·9	8·9	10·6	9·9	9·6	7·9
16	11·3	15·0	3·0	1·7	-1·5	-2·2	-2·5	-1·4	-0·2	3·3	7·2	11·6	15·1	17·5	17·5	15·1	12·3	9·9	8·9	9·5	9·8	9·2	9·1	8·9	7·8
17 d	8·3	7·1	6·0	4·2	2·0	-0·5	-1·5	-1·8	-1·1	0·4	3·3	11·6	18·4	20·6	19·5	18·3	18·8	19·7	33·3	35·7	53·1	37·9	31·5	39·9	*16·0*
18 d	4·2	-18·1	-0·1	-8·8	-5·5	-10·6	-14·4	-8·5	-9·6	-2·0	2·3	12·7	17·4	18·7	19·9	12·5	15·8	23·7	20·9	27·3	15·9	14·7	10·4	3·3	*5·9*
19 d	2·3	-6·3	9·3	-0·5	-3·7	-0·9	2·3	2·6	7·3	6·8	7·7	10·9	13·2	13·9	11·7	10·1	9·9	7·6	8·8	9·8	11·8	11·4	9·9	10·1	6·9
20 d	12·3	14·0	6·7	6·8	6·1	-1·7	3·3	5·8	6·6	3·3	5·4	7·9	13·5	12·3	10·0	12·7	5·9	9·7	8·9	8·3	9·4	12·2	7·6	10·9	8·2
21	9·5	9·4	9·4	10·9	4·2	3·7	2·7	-1·0	-0·3	3·2	7·7	13·9	15·6	17·0	17·3	16·0	14·7	13·1	12·3	12·6	10·9	9·3	8·8	8·1	9·6
22	6·7	5·1	3·7	6·9	3·1	1·9	0·6	0·4	2·3	5·5	5·6	10·3	13·9	18·7	17·6	15·6	13·6	12·7	10·9	11·4	9·0	8·1	12·5	10·9	8·3
23 d	5·6	7·8	6·8	11·0	3·2	4·3	2·8	3·9	5·8	5·5	5·1	13·8	18·5	17·7	16·5	15·7	13·4	11·4	9·7	10·1	10·9	8·9	6·7	8·9	9·3
24	9·7	9·8	6·3	6·7	4·5	0·0	1·7	-0·3	0·1	3·3	6·6	9·7	11·3	13·7	12·7	13·6	10·7	9·3	9·6	10·7	11·1	10·8	10·9	9·7	8·0
25	5·3	9·4	2·1	-0·1	1·3	1·3	0·5	0·5	2·4	6·8	9·8	12·7	17·5	17·6	13·9	13·3	12·7	12·8	10·9	12·3	10·9	9·3	10·0	9·9	8·5
26	6·0	5·3	7·4	18·2	6·0	2·8	5·1	6·2	7·1	8·2	8·0	11·7	13·8	14·9	17·5	13·2	10·2	7·6	7·5	8·9	10·0	8·8	9·4	8·9	9·3
27	9·7	9·0	8·9	12·9	14·4	15·6	17·5	13·9	6·0	3·2	7·5	11·9	14·0	16·5	16·8	14·9	13·0	10·6	10·1	8·5	7·7	8·2	8·9	9·7	11·2
28	7·8	6·0	7·9	6·1	4·0	2·1	1·3	-0·1	1·3	0·4	1·8	6·1	10·4	11·7	12·6	14·1	12·3	10·6	8·9	9·9	10·7	8·9	7·2	8·6	7·1
29	8·9	5·6	6·0	9·5	8·5	5·9	4·7	3·7	1·7	0·9	6·6	13·5	15·6	15·4	16·8	14·9	11·6	10·8	8·2	9·5	9·0	8·9	7·3	6·1	8·7
30 q	5·9	6·3	7·1	6·0	5·6	5·1	3·9	2·0	3·3	5·7	8·9	12·6	15·5	16·4	15·6	13·7	13·4	11·8	11·6	10·9	10·4	11·0	10·9	8·4	9·3
31	8·7	7·8	4·7	1·2	-0·8	-1·7	-1·6	-1·5	-0·5	2·1	5·8	11·5	17·8	20·3	21·3	18·4	15·7	13·0	9·2	9·4	12·6	10·9	6·7	4·0	8·1
Mean	7·1	5·8	5·0	4·6	2·7	0·6	*0·6*	0·9	1·9	3·8	6·9	11·5	15·6	*17·2*	16·9	15·7	13·7	12·5	11·8	12·3	12·5	11·5	10·1	9·6	8·8

TERRESTRIAL MAGNETIC FORCE: VERTICAL COMPONENT

Mean values for periods of sixty minutes ending at exact hours, G.M.T.

35 LERWICK (V) — 46,000γ (0·46 C.G.S. unit) + — JULY 1947

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1	986	998	998	998	988	986	992	999	994	989	994	993	998	1005	1009	1011	1010	1018	1039	1036	1018	1005	1003	1001	1003
2	968	964	967	985	973	967	992	997	997	997	987	990	993	1005	1011	1005	1035	1074	1072	1041	1020	1005	1009	1011	1003
3 q	1010	1010	1015	1015	1012	1010	1007	1003	1004	998	1004	1005	1003	1003	1005	1005	1017	1012	1018	1016	1013	1016	1010	1009	1009
4 q	1010	1010	1010	1010	1009	1010	1012	1010	1004	993	991	991	986	986	984	986	996	1003	1002	999	998	997	997	995	999
5 q	996	997	998	998	998	1004	1005	999	992	978	970	968	968	973	975	975	985	997	999	1004	999	997	995	994	990
6	991	985	973	986	997	999	1002	1004	1004	992	980	981	979	986	991	999	998	1011	1011	1012	1004	999	993	979	994
7	960	971	979	986	973	981	986	986	980	973	971	973	972	967	974	990	999	997	996	999	1009	1005	992	983	983
8	981	980	992	995	991	980	980	981	985	985	987	991	986	987	997	1004	1004	1001	1010	1024	1010	999	991	974	992
9	974	980	986	987	986	981	981	986	986	981	978	972	962	963	968	973	978	986	986	994	1004	1005	998	978	982
10	930	940	929	915	943	973	991	997	993	986	986	992	993	989	988	992	1023	1037	1023	1010	1005	1005	1005	978	984
11	946	952	973	981	979	985	985	985	984	976	975	979	973	973	975	984	999	1010	1007	998	1004	993	967	953	*981*
12	961	962	956	937	938	965	983	991	997	998	999	997	985	986	992	997	998	1004	1016	1024	1011	1004	998	992	987
13	987	968	967	982	992	992	995	999	1004	1003	998	992	987	986	1003	1004	1029	1046	1040	1017	999	997	997	997	1000
14 q	992	983	981	991	997	999	1004	1004	1004	993	993	992	981	978	987	990	994	1018	1028	1023	1020	1013	1009	998	999
15	970	957	956	957	967	974	985	992	990	987	994	992	985	986	993	995	992	1010	1010	1011	1010	1004	999	998	988
16	993	968	969	992	997	998	1004	1004	999	991	985	979	974	983	992	992	994	991	992	992	991	991	992	992	990
17 d	991	997	998	998	1002	1003	997	996	994	990	988	979	980	983	985	991	1004	1016	1003	1154	1072	1138	1295	1137	1029
18 d	1203	1066	979	959	1011	1039	1046	1015	996	990	985	1003	1025	1039	1154	1249	1151	1118	1058	1009	1052	1041	950	895	*1043*
19 d	862	812	798	819	936	986	985	991	995	1027	1052	1056	1052	1065	1059	1065	1062	1077	1084	1076	1044	1035	1014	1008	998
20 d	1004	953	967	942	949	985	993	983	966	990	1015	1036	1047	1107	1115	1089	1150	1126	1090	1071	1046	1028	993	997	1027
21	1004	1003	998	997	991	994	1003	1013	1011	1015	1017	1015	1016	1003	997	1004	1015	1009	1010	1022	1028	1023	1011	1009	1009
22	1004	1009	1014	1004	1003	1015	1017	1015	1016	1015	1004	997	1003	1002	1022	1039	1039	1052	1052	1048	1044	1044	1025	1003	1020
23 d	965	990	990	988	972	983	995	1004	999	1008	1027	1021	1007	1014	1027	1027	1046	1034	1038	1028	1022	1002	996	1002	1008
24	990	986	996	1008	989	990	1007	1011	1015	1015	1015	1010	1006	1021	1019	1021	1030	1040	1033	1020	1015	1021	1014	1005	1011
25	981	972	922	935	977	996	1002	1011	1008	1005	999	1000	1004	1002	1027	1039	1046	1049	1064	1045	1038	1026	998	990	1006
26	989	990	962	928	883	925	968	973	983	989	999	1006	1021	1035	1037	1048	1027	1059	1058	1043	1035	1021	1004	1010	1000
27	1002	991	992	984	966	953	938	928	964	983	997	1008	1014	1018	1035	1032	1046	1033	1020	1021	1022	1020	1009	1003	999
28	981	986	996	999	1002	1002	1000	996	998	1001	1002	1002	995	1002	1015	1019	1021	1020	1021	1021	1014	1003	996	997	1004
29	983	975	970	964	975	984	986	988	999	1002	1001	997	993	991	997	1020	1037	1031	1017	1009	1002	996	996	999	996
30 q	1000	1000	999	1001	997	997	995	1001	1001	1001	997	990	993	995	996	1001	1005	1007	1002	1002	1002	999	999	997	999
31	985	983	983	988	990	995	993	994	991	989	984	977	980	983	983	987	996	1018	1031	1024	1002	999	999	979	993
Mean	987	979	975	*975*	980	989	994	995	995	995	996	996	995	1000	1010	1017	1023	*1029*	1027	1026	1018	1014	1008	996	1001

DAILY EXTREMES OF TERRESTRIAL MAGNETIC ELEMENTS, MAGNETIC CHARACTER FIGURES AND TEMPERATURE IN MAGNET HOUSE

36 LERWICK — JULY 1947

	TERRESTRIAL MAGNETIC ELEMENTS																3-hr. range indices K	Sum of K indices	Magnetic character of day (0-2)	Temperature in magnet house 200 +
	Horizontal force					Declination					Vertical force									
	Maximum 14,000γ +		Minimum 14,000γ +		Range	Maximum 11° +		Minimum 11° +		Range	Maximum 46,000γ +		Minimum 45,000γ +		Range					
	h. m.	γ	γ	h. m.	γ	h. m.	′	′	h. m.	′	h. m.	γ	γ	h. m.	γ					°A.
1	17 57	471	321	11 30	150	13 55	18·7	-1·3	05 40	20·0	18 53	1051	982	04 50	69	3,2,2,2,2,2,4,3,3	21	1	88·7
2	16 12	482	314	10 50	168	13 12	19·9	-3·6	05 31	23·5	17 53	1091	949	04 55	142	3,3,3,2,3,4,3,2	23	1	89·0
3 q	17 48	420	315	8 53	105	13 33	16·2	-3·3	05 27	19·5	16 21	1023	996	09 37	27	2,2,2,2,2,3,2,2	17	0	89·2
4 q	20 32	398	315	11 09	83	13 56	19·3	-3·1	06 02	22·4	06 47	1013	980	15 01	33	1,2,2,2,2,2,1,1,1	12	0	88·9
5 q	19 33	417	328	10 17	89	15 34	18·8	-3·0	06 51	21·8	06 01	1007	967	12 15	40	1,1,2,2,2,2,2,1,2	13	0	88·3
6	17 10	438	316	11 14	122	14 27	20·6	-1·9	06 59	22·5	17 52	1021	963	24 00	58	2,2,2,2,2,2,3,2,3	18	1	88·3
7	20 04	448	326	10 02	122	14 57	23·6	-5·8	05 06	29·4	20 35	1011	954	00 31	57	2,3,1,2,2,2,2,3	17	0	88·0
8	18 20	462	321	11 50	141	14 01	20·8	-3·3	06 01	24·1	18 51	1028	966	24 00	62	2,2,2,2,3,3,3,3	20	1	88·0
9	19 09	440	308	10 40	132	15 03	19·5	-6·0	06 40	25·5	20 50	1010	937	24 00	73	2,2,2,2,2,2,2,3	17	0	88·1
10	16 00	454	315	2 45	139	15 33	19·1	-3·8	02 37	22·9	17 46	1040	911	03 33	129	4,3,2,2,2,3,2,3	21	1	88·0
11	19 06	449	328	11 49	121	15 12	20·9	-3·9	07 58	24·8	18 02	1016	942	01 00	74	2,2,2,2,3,3,3,3	20	1	88·4
12	18 20	447	308	10 50	139	13 21	20·7	-3·7	06 14	24·4	19 20	1029	929	03 58	100	2,3,2,2,2,3,3,2	19	1	88·3
13	17 26	472	299	11 10	173	13 51	20·8	-5·6	01 49	26·4	17 37	1055	959	01 40	96	3,2,2,2,3,4,3,2	21	1	88·4
14 q	19 13	449	328	10 22	121	13 00	18·5	-1·7	07 28	20·2	18 20	1030	974	13 47	56	2,1,1,2,2,3,3,2	16	0	88·1
15	16 58	446	317	11 13	129	13 26	16·7	-2·3	03 15	19·0	17 49	1019	951	02 46	69	3,2,2,2,2,3,2,1	17	0	88·4
16	23 55	401	316	10 59	85	01 20	24·2	-3·2	04 55	27·4	07 00	1005	937	01 43	68	4,1,2,2,2,1,1,1	14	0	89·0
17 d	20 42	*868*	13	23 57	855	20 48	*96·5*	-9·0	22 30	*105·5*	22 40	*1768*	899	18 17	*869*	1,1,1,3,2,6,6,8	28	2	89·2
18 d	15 58	835	*-205*	1 00	*1040*	00 02	38·3	*-37·8*	00 58	76·1	01 03	1298	850	22 28	448	7,6,5,5,7,6,6,5	41	2	89·5
19 d	17 26	514	-81	1 47	595	00 22	24·3	-28·4	01 43	52·7	18 05	1100	*739*	01 23	361	6,5,3,3,3,4,3,3	30	1	90·3
20 d	15 55	547	272	3 47	275	01 00	22·9	-5·3	05 45	28·2	16 20	1162	923	03 45	239	4,4,3,3,4,5,3,3	29	1	91·0
21	19 00	449	309	9 40	140	13 21	17·5	-2·6	07 39	20·1	20 18	1133	984	06 09	149	2,3,3,2,2,2,3,2	19	1	91·4
22	19 04	465	306	10 03	159	13 46	20·6	-1·3	07 42	21·9	17 50	1158	990	24 00	168	2,2,2,2,3,3,3,3	20	1	92·0
23 d	21 14	437	292	10 02	145	13 00	20·2	-3·2	06 45	23·4	16 21	1054	941	00 22	113	3,3,3,3,4,3,3,3	25	1	91·8
24	16 15	459	310	10 42	149	13 50	14·9	-4·2	05 50	19·1	17 00	1045	978	00 50	67	2,3,2,2,3,3,2,2	19	1	91·5
25	19 15	454	302	14 26	152	12 59	20·1	-2·7	03 54	22·8	18 11	1071	914	03 10	157	3,4,3,3,4,4,3,3	27	1	91·1
26	17 11	463	263	3 31	200	03 43	25·8	-2·2	04 43	28·0	17 52	1071	873	04 22	198	3,4,3,2,4,4,2,3	25	1	91·3
27	16 06	439	294	7 03	145	06 46	21·5	-0·5	09 15	22·0	16 27	1057	919	07 12	138	2,3,4,3,4,3,3,2	24	1	89·8
28	18 19	438	305	10 57	133	15 10	15·1	-3·3	07 42	18·4	18 52	1024	973	00 47	51	2,2,2,2,3,2,3,2	18	0	89·8
29	16 23	421	288	10 38	133	14 53	18·3	-0·4	09 14	18·7	17 00	1044	959	03 20	85	2,2,2,3,3,3,2,1	18	1	89·4
30 q	19 11	409	331	10 50	*78*	14 05	16·8	1·3	07 53	*15·5*	17 20	1009	990	11 11	*19*	1,1,2,1,2,2,1,2	12	0	89·0
31	17 50	435	319	11 12	116	13 44	22·9	-2·6	07 13	25·5	18 35	1004	962	23 59	42	2,1,2,2,2,2,2,3	16	0	88·8
Mean	- -	475	271	- -	204	- -	23·0	-5·1	- -	28·1	- -	1079	942	- -	137	-	-	0·71	89·4

q denotes an international quiet day and d an international disturbed day.

TERRESTRIAL MAGNETIC FORCE: HORIZONTAL COMPONENT

Mean values for periods of sixty minutes ending at exact hours, G.M.T.

37 LERWICK (H) — 14,000γ (0·14 C.G.S. unit) + — AUGUST 1947

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1	330	342	357	361	385	367	340	342	341	326	313	304	335	357	381	412	400	397	407	433	432	397	387	378	368
2	374	372	375	375	375	378	371	353	342	326	313	305	330	343	370	388	393	417	393	390	403	406	375	371	368
3	375	371	379	382	378	370	361	353	340	321	317	306	310	331	364	366	379	388	409	418	403	393	389	379	366
4	375	374	379	375	371	354	352	349	338	335	314	325	333	348	362	379	375	374	375	381	389	392	392	382	363
5 q	382	379	369	375	381	378	367	358	347	335	327	325	340	346	355	365	384	396	396	391	394	392	389	393	369
6	389	382	385	382	376	371	363	359	349	334	326	303	339	362	360	382	378	394	394	409	410	399	379	386	371
7	384	380	382	368	354	370	368	351	332	314	306	307	336	343	315	372	376	393	390	407	393	390	379	384	362
8 q	377	387	368	377	376	372	362	358	349	328	312	314	318	357	383	384	379	379	376	379	385	387	390	387	366
9 q	386	381	382	388	386	379	379	364	344	320	307	304	315	333	354	373	386	394	400	401	394	395	379	372	367
10 q	385	381	384	383	383	368	361	354	336	314	300	311	315	322	342	351	366	376	387	398	401	402	387	379	362
11	375	372	376	383	383	380	370	357	342	329	325	312	314	361	401	412	408	423	422	412	397	390	383	371	375
12	376	376	343	283	257	250	234	267	294	280	296	314	321	315	358	365	380	380	368	376	398	400	379	368	332
13	380	377	378	373	371	356	335	323	321	311	310	312	335	339	389	465	493	463	456	448	448	401	350	286	*376*
14	299	300	335	364	366	374	374	361	350	338	329	332	339	361	383	420	438	460	427	402	389	378	372	374	369
15 d	372	369	369	369	370	366	362	354	337	326	311	350	359	382	419	437	456	389	407	393	450	334	116	126	355
16 d	-97	114	224	258	324	317	292	291	298	287	287	361	454	541	600	636	592	498	439	423	349	334	322	288	351
17	192	216	300	322	261	292	350	304	266	304	326	304	333	345	408	476	502	613	493	426	376	226	290	330	344
18 d	332	-29	170	329	304	171	288	315	302	245	265	315	321	383	430	501	514	475	491	405	385	325	269	163	319
19	345	360	311	267	318	350	329	331	322	310	286	340	331	321	381	537	544	455	475	422	403	367	132	309	356
20	263	-14	286	366	365	328	290	325	316	296	312	300	349	350	430	461	536	383	370	379	374	370	339	190	332
21	212	340	251	243	316	293	304	316	331	315	285	282	329	338	383	419	453	478	454	425	374	346	373	374	343
22 d	371	370	365	374	368	334	354	337	305	202	227	284	301	318	276	356	469	408	378	377	332	317	325	281	335
23 d	130	-65	123	127	147	259	297	311	311	307	302	277	300	413	570	431	379	463	416	370	347	352	349	361	*303*
24	356	343	336	317	321	343	319	301	300	306	312	316	367	366	394	393	397	387	396	419	365	318	363	354	349
25	306	346	273	304	339	348	347	342	304	283	295	304	325	387	375	428	424	416	411	399	388	375	372	358	352
26	361	360	359	364	361	354	358	358	327	317	317	314	316	340	354	358	375	379	390	383	379	375	376	386	357
27	363	342	325	347	365	375	356	315	312	209	322	326	339	353	358	355	364	371	376	373	376	375	369	368	347
28	365	367	370	368	367	369	368	358	347	329	328	338	348	358	377	380	371	399	401	397	405	400	384	321	367
29	328	324	296	361	368	365	358	343	332	309	309	326	340	358	366	396	386	374	376	380	386	384	381	375	355
30 q	374	372	368	365	368	365	356	346	340	330	318	320	331	346	358	370	375	371	372	376	383	380	380	382	360
31	380	374	372	368	366	372	370	361	345	333	332	330	346	361	368	368	405	423	423	423	416	390	372	369	374
Mean	327	312	332	343	347	344	343	337	327	*307*	307	315	335	357	386	411	*422*	417	409	401	391	371	350	340	355

MAGNETIC DECLINATION (WEST)

Mean values for periods of sixty minutes ending at exact hours, G.M.T.

38 LERWICK (D) — 11° + — AUGUST 1947

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′
1	8·8	4·2	-3·9	-5·7	-2·3	-8·3	-10·1	-2·2	4·2	4·0	9·2	13·7	18·3	22·1	21·5	21·3	15·6	12·8	12·7	11·8	6·2	9·2	8·7	8·3	7·5
2	6·9	5·1	2·9	1·3	3·3	2·5	-1·6	4·0	3·9	4·7	10·3	16·6	20·2	22·1	21·8	16·9	12·9	12·8	7·7	8·2	11·6	6·5	5·2	8·8	8·9
3	7·0	7·1	5·8	4·2	1·5	-1·3	-1·4	-2·3	0·4	4·6	7·5	12·4	17·0	19·7	18·9	16·5	11·0	9·3	8·3	5·3	9·4	10·9	10·1	8·2	7·9
4	6·3	7·7	5·3	3·1	2·6	2·5	1·2	0·9	-0·4	0·2	6·4	12·8	17·5	20·0	18·7	15·5	11·6	8·5	8·0	8·6	9·3	9·1	8·1	6·9	7·9
5 q	5·0	5·7	5·8	6·3	2·4	0·1	-0·4	0·6	2·8	5·1	9·0	14·0	18·6	20·8	20·1	18·9	17·8	12·8	11·4	11·2	9·9	10·1	8·9	7·1	9·3
6	7·8	5·9	5·6	4·1	3·3	0·2	-2·0	-2·7	-1·7	2·0	7·1	14·0	18·6	19·5	17·8	14·7	11·7	10·7	9·8	10·9	9·1	5·1	6·8	9·0	7·8
7	10·0	6·3	7·1	5·9	5·1	1·3	-3·4	-2·5	-0·4	2·6	3·9	9·4	16·5	21·9	21·4	18·5	15·7	13·4	10·2	11·7	10·3	9·7	9·6	9·5	8·9
8 q	10·6	3·6	1·2	3·3	2·1	-0·8	1·2	1·3	0·7	4·1	7·1	12·8	18·3	20·7	17·7	15·4	12·7	11·3	10·9	10·5	10·7	10·4	10·4	9·4	8·6
9 q	8·6	6·6	4·8	5·2	2·0	-0·3	-0·6	-0·1	0·0	2·0	4·8	10·1	16·2	18·7	18·4	16·1	13·7	12·3	10·9	10·8	10·9	12·6	8·9	8·5	8·4
10 q	8·0	7·9	5·5	4·6	3·3	2·9	2·7	-1·1	-2·2	1·8	5·6	9·4	16·2	18·5	18·5	14·3	11·8	10·4	9·7	10·2	10·3	10·4	9·2	5·5	8·1
11	5·9	3·7	2·0	2·7	0·4	-2·2	-3·3	-1·6	-0·5	4·2	8·8	12·8	17·6	22·6	22·3	17·7	14·7	12·7	11·3	10·3	10·5	9·9	4·6	6·3	8·1
12	5·8	-0·6	-7·3	5·4	1·7	0·4	0·6	3·3	0·9	2·8	8·0	10·0	14·7	16·3	18·7	13·2	12·2	12·7	11·1	11·3	11·3	12·3	11·8	3·3	7·5
13	-0·1	4·2	3·6	3·3	3·4	0·2	0·4	1·9	7·1	8·6	9·6	12·7	17·6	18·5	16·7	14·3	19·9	13·7	10·9	14·2	12·9	16·4	15·1	3·3	9·5
14	-1·7	0·1	9·6	4·6	3·3	0·3	2·0	3·7	3·9	7·2	8·9	12·4	14·7	15·6	14·6	10·8	11·1	12·6	9·8	10·9	12·8	9·7	12·6	6·9	8·2
15 d	5·9	6·0	6·0	6·1	4·4	2·3	0·4	1·1	3·4	6·4	6·7	15·9	31·8	28·8	28·5	29·6	25·3	22·3	21·0	17·5	18·6	18·0	12·7	-0·8	*13·3*
16 d	-19·1	-15·0	-5·3	-4·3	-4·9	-7·2	-9·5	-4·8	-0·9	1·6	2·5	8·7	9·9	3·3	5·2	7·4	9·8	10·9	11·1	10·0	5·8	6·1	10·2	5·1	*1·5*
17	8·1	1·8	-0·7	6·9	15·3	9·8	-3·4	3·4	3·3	6·1	8·2	12·8	11·2	13·1	13·0	10·2	11·7	13·9	10·9	8·8	8·9	-2·5	5·1	2·8	7·5
18 d	3·0	-1·5	-8·3	-6·0	-1·3	13·7	9·9	-0·5	-3·6	5·0	8·7	12·9	9·2	10·9	13·4	10·3	11·4	9·2	8·2	7·9	9·9	-0·5	10·7	18·2	6·3
19	1·8	4·0	0·8	7·0	2·8	-0·9	7·8	4·3	6·1	4·3	9·0	14·7	14·7	16·5	16·4	16·7	7·4	13·3	12·7	12·9	10·9	10·1	-8·0	9·9	8·1
20	3·3	-5·1	-12·7	-1·4	-0·6	1·0	6·1	6·9	3·7	5·4	5·1	9·4	11·8	13·3	13·2	10·4	10·4	9·7	11·0	11·3	11·4	7·5	9·4	4·9	6·1
21	-0·1	4·4	14·7	8·0	7·5	6·6	11·7	11·8	9·8	7·1	4·7	13·1	16·5	17·2	12·7	7·9	10·8	8·6	6·1	6·1	-0·6	0·9	7·5	8·6	8·4
22 d	8·9	8·6	10·1	5·3	7·5	10·7	9·7	4·3	6·1	-31·4	-42·6	11·7	16·1	16·0	11·3	6·1	-0·5	8·9	11·7	7·4	14·1	8·0	7·1	9·6	5·2
23 d	5·9	4·7	-12·9	-12·9	-0·7	-0·1	-1·1	-3·4	-1·3	2·3	5·2	8·1	12·3	14·0	18·5	12·7	10·2	10·9	4·4	8·1	11·2	9·1	7·9	9·5	5·1
24	9·1	5·1	5·7	8·1	8·9	5·8	8·7	11·0	9·3	4·3	6·4	10·6	12·1	13·3	10·9	7·0	4·3	5·7	2·8	3·5	4·7	6·1	4·3	5·5	7·2
25	4·0	7·1	4·3	6·3	3·4	2·0	0·7	1·3	0·5	4·7	8·5	14·9	15·1	17·8	13·1	11·9	9·1	3·4	7·8	8·8	8·7	4·7	8·2	8·4	7·3
26	6·8	4·8	3·3	3·3	3·3	6·2	4·7	3·2	1·4	5·5	9·5	11·5	13·1	13·5	11·8	10·4	7·1	5·1	5·6	7·8	9·1	9·2	8·3	7·1	7·2
27	5·1	3·4	-0·5	-6·5	-1·5	-2·8	-1·5	0·1	8·0	10·5	11·5	13·4	14·4	14·2	12·9	9·9	8·2	8·1	8·8	8·9	8·7	9·5	8·9	7·2	6·6
28	5·5	4·4	5·2	5·3	3·1	1·3	-0·5	-1·1	-0·3	2·3	8·3	14·0	17·5	19·4	19·4	16·4	9·9	10·1	12·0	11·8	10·7	7·2	7·9	4·0	8·1
29	5·9	0·9	2·1	-6·2	-1·3	-1·2	0·0	-0·5	-0·4	5·1	10·0	15·6	19·4	18·6	16·5	16·7	13·4	10·3	10·9	10·9	10·2	7·9	7·1	6·3	7·4
30 q	3·9	4·2	4·1	5·1	1·1	-1·3	-2·6	-0·4	0·9	2·5	7·2	12·7	15·8	15·4	14·3	12·7	9·9	7·6	8·1	8·0	7·8	6·1	7·0	6·6	6·5
31	6·2	5·8	4·7	2·6	2·8	2·1	-0·5	-3·0	-2·8	4·4	9·6	13·7	18·5	19·3	17·5	14·7	12·8	12·7	13·4	12·7	8·8	10·8	3·3	3·8	8·1
Mean	4·9	3·6	2·2	2·4	2·6	1·5	*0·8*	1·2	2·0	3·2	6·0	12·5	16·2	*17·5*	16·6	14·0	11·8	10·9	10·0	10·0	9·8	8·4	8·0	7·0	7·6

TERRESTRIAL MAGNETIC FORCE: VERTICAL COMPONENT

Mean values for periods of sixty minutes ending at exact hours, G.M.T.

39 LERWICK (V) — 46,000γ (0·46 C.G.S. unit) + — AUGUST 1947

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1	946	895	916	953	983	996	992	963	964	974	976	970	967	972	976	984	1007	1006	1000	1007	1021	1014	1004	1002	979
2	998	994	986	989	990	989	990	988	985	988	984	979	974	982	988	1007	1012	1003	1019	1014	994	983	973	977	991
3	986	984	988	996	1001	1002	997	993	988	983	983	982	983	988	1000	1014	1023	1018	1008	1014	1007	997	990	987	996
4	966	971	981	986	990	989	982	984	992	987	985	983	992	996	996	990	992	992	990	989	986	988	988	988	987
5 q	982	975	979	979	984	989	991	990	988	977	975	977	980	981	981	983	982	993	1004	1001	994	990	987	987	985
6	985	988	989	991	992	995	994	993	986	982	982	980	971	982	987	983	991	991	993	994	1002	1006	992	983	989
7	957	964	975	982	963	954	971	982	982	975	968	959	957	961	963	970	975	981	997	995	998	991	988	984	975
8 q	971	935	951	974	987	994	993	988	988	989	988	982	981	986	1012	1031	1036	1014	998	988	989	989	987	987	989
9 q	982	982	982	982	989	993	989	988	987	985	982	977	975	976	981	982	982	983	988	993	993	988	995	990	985
10 q	981	981	983	989	992	991	983	988	989	986	979	975	976	982	988	998	998	990	985	982	983	986	992	994	986
11	988	985	987	988	989	994	995	994	994	991	982	981	971	968	993	1023	1037	1037	1030	1020	1011	999	988	983	997
12	981	943	918	847	859	887	897	914	963	989	988	993	990	1003	1005	1024	1022	1009	1006	999	990	1003	1006	1010	*969*
13	1005	998	994	994	988	991	995	990	988	991	999	1000	1008	1030	1038	1081	1100	1129	1086	1068	1060	1049	1002	939	1022
14	939	897	896	953	965	986	990	993	997	1001	1001	1000	999	1013	1044	1082	1092	1094	1092	1057	1031	1013	1001	982	1005
15 d	992	999	1005	1005	1000	1000	998	997	995	990	981	981	969	981	992	995	1018	1029	999	993	1005	1018	1152	1153	1010
16 d	1181	834	937	978	982	1015	1026	1012	1017	1027	1042	1036	1075	1184	1191	1217	1221	1177	1129	1086	1012	986	981	906	1052
17	888	845	869	876	932	892	978	1005	992	1011	1030	1043	1067	1104	1134	1178	1152	1128	1079	1048	1025	815	885	921	996
18 d	960	877	858	912	960	917	895	969	1018	1043	1030	1030	1079	1132	1139	1171	1174	1183	1109	1055	1060	1030	954	807	1015
19	920	992	982	951	952	981	983	986	1004	1014	1012	1030	1094	1116	1074	1118	1232	1156	1117	1067	1049	1023	856	898	1026
20	928	810	912	980	998	1007	998	988	1005	1014	1013	1029	1030	1061	1083	1122	1171	1148	1080	1058	1043	1033	970	864	1014
21	772	922	925	840	896	920	938	962	984	1015	1042	1054	1043	1048	1068	1115	1104	1128	1116	1085	1034	944	998	1006	998
22 d	1005	1001	994	1000	1000	980	960	984	1000	1072	1254	1115	1098	1106	1120	1160	1190	1158	1092	1029	986	981	1002	970	*1052*
23 d	833	770	783	821	842	832	943	973	1005	1016	1013	1020	1019	1037	1037	1078	1054	1050	1063	1048	1030	1023	1017	987	971
24	945	957	975	973	949	956	985	998	998	1018	1031	1035	1047	1064	1082	1085	1067	1050	1054	1042	1016	965	987	987	1011
25	946	895	864	877	943	984	1005	1006	1019	1041	1048	1025	1018	1024	1070	1091	1140	1098	1059	1048	1036	1018	973	974	1008
26	982	1006	1017	1012	1012	998	990	993	1005	1013	1013	1019	1029	1036	1048	1055	1059	1059	1054	1041	1024	1018	1012	994	1020
27	944	927	906	913	962	982	991	993	981	983	991	997	999	1006	1012	1015	1016	1011	1005	1006	1011	1012	1016	1014	987
28	1012	1008	1008	1008	1008	1007	1008	1010	1005	1004	999	990	988	994	1000	1017	1036	1029	1030	1025	1023	1023	1030	989	1011
29	891	906	924	943	991	1006	1013	1018	1010	1005	1000	1001	1005	1008	1018	1013	1036	1035	1016	1005	1002	1005	1005	1010	994
30 q	1005	1012	1010	1000	993	1001	1011	1010	1006	1007	1006	1002	1000	1006	1012	1011	1011	1016	1012	1007	1007	1010	1006	1005	1007
31	1005	1007	1010	1011	1012	1007	1010	1008	1005	1000	988	986	984	998	1012	1024	1024	1032	1044	1057	1069	1051	1018	1012	1016
Mean	964	*944*	952	958	971	975	984	989	995	1002	1009	1004	1009	1023	1034	1052	*1063*	1056	1041	1027	1016	998	992	977	1001

DAILY EXTREMES OF TERRESTRIAL MAGNETIC ELEMENTS, MAGNETIC CHARACTER FIGURES AND TEMPERATURE IN MAGNET HOUSE

40 LERWICK — AUGUST 1947

	TERRESTRIAL MAGNETIC ELEMENTS															3-hr. range indices K	Sum of K indices	Magnetic character of day (0-2)	Temperature in magnet house 200 +
	Horizontal force					Declination					Vertical force								
	Maximum 14,000γ +		Minimum 14,000γ +		Range	Maximum 11° +		Minimum 11° +		Range	Maximum 46,000γ +		Minimum 46,000γ +		Range				
	h. m.	γ	h. m.	γ	γ	h. m.	′	h. m.	′	′	h. m.	γ	h. m.	γ	γ				°A.
1	20 23	451	11 11	291	160	15 19	27·3	06 16	−13·5	40·8	20 05	1031	01 24	878	153	4,3,4,3,3,3,3,2	25	1	88·8
2	17 32	432	10 59	293	139	14 22	24·2	06 51	−8·7	32·9	18 44	1024	22 23	968	56	2,2,3,3,3,3,2,3	21	1	88·4
3	19 31	426	11 29	296	130	13 46	21·3	07 02	−3·5	24·8	16 30	1030	23 59	963	67	2,2,2,2,3,2,2,2	17	0	88·9
4	21 49	397	10 41	295	102	13 20	21·3	09 00	−2·3	23·6	13 45	1002	00 07	957	45	2,2,2,3,2,2,2,2	17	0	89·0
5 q	18 01	409	11 14	320	89	12 58	21·7	06 39	−1·8	23·5	18 50	1007	01 47	972	35	2,2,1,2,2,2,2,1	14	0	88·8
6	20 08	423	08 51	339	84	13 11	21·9	06 43	−7·0	28·9	21 03	1018	12 13	968	50	2,2,2,3,3,2,3,3	20	1	88·8
7	00 01	390	10 20	300	90	13 46	42·2	06 25	−4·7	46·9	18 29	1001	00 46	945	56	2,2,2,2,2,2,2,1	15	0	88·8
8 q	15 35	394	11 13	303	91	13 51	21·8	05 39	−2·6	24·4	16 06	1041	01 28	932	109	3,2,1,2,3,2,2,1	16	0	88·5
9 q	21 09	404	11 25	300	104	14 01	19·4	06 18	−2·2	21·6	22 29	998	11 57	975	*23*	1,2,2,2,2,2,1,2	14	0	88·7
10 q	21 16	405	11 28	292	113	14 22	20·3	08 19	−4·3	24·6	16 21	1001	11 04	970	31	1,2,2,2,2,2,2,2	15	0	88·9
11	16 49	430	11 34	301	129	13 54	24·8	08 12	−6·3	31·1	16 04	1043	13 30	962	81	2,2,2,2,4,2,2,3	19	1	89·4
12	20 57	412	06 45	204	208	14 37	21·6	02 58	−22·1	43·7	15 56	1030	03 36	822	208	5,4,4,3,3,3,3,4	29	1	89·6
13	16 55	540	23 45	266	274	16 54	25·2	00 04	−7·1	32·3	17 39	1153	23 25	911	242	3,2,3,2,2,4,4,5	27	1	89·4
14	17 27	465	00 22	281	185	22 48	17·5	00 07	−5·2	22·7	18 17	1103	02 33	873	230	4,3,2,2,3,3,4,3	24	1	90·0
15 d	16 20	550	22 26	−41	591	16 11	36·7	21 52	−9·2	45·9	22 13	1375	21 51	951	424	2,1,2,4,4,5,4,7	29	2	90·4
16 d	15 40	665	00 22	−285	950	00 21	19·9	00 39	−53·0	72·9	00 20	1458	01 15	790	*668*	8,5,3,5,5,5,5,5	41	2	90·6
17	17 49	679	00 42	43	636	18 47	34·1	21 35	−19·5	53·6	15 50	1212	23 41	685	527	6,4,4,3,4,6,5,6	38	2	90·2
18 d	16 03	552	01 36	−249	801	23 20	27·7	01 51	−33·3	61·0	16 02	1215	23 21	714	501	7,6,5,4,5,4,5,6	42	2	90·0
19	16 02	643	22 47	−122	765	23 07	36·4	22 50	−40·6	77·0	16 40	1261	23 04	717	544	5,4,3,4,4,5,5,7	37	1	90·1
20	16 30	599	01 41	−202	801	14 11	19·6	01 42	−26·7	46·3	16 40	1202	01 29	737	465	7,3,4,3,4,6,3,6	36	2	90·5
21	16 36	520	00 11	130	390	02 53	27·8	20 38	−16·8	44·6	18 02	1154	00 34	731	423	6,5,4,3,4,4,5,4	35	1	90·8
22 d	10 31	*744*	10 39	54	690	11 59	25·9	10 33	*−97·6*	*123·5*	10 41	*1505*	23 54	882	623	3,3,3,8,5,6,5,4	37	2	90·2
23 d	14 12	589	01 18	*−437*	*1026*	01 22	*62·3*	02 42	−31·8	94·1	15 29	1102	01 40	*626*	476	8,6,4,3,6,5,5,3	40	2	90·0
24	19 10	437	07 56	271	166	13 46	18·3	18 55	−3·2	21·5	15 05	1091	21 18	928	163	3,3,3,3,3,3,4,3	25	1	90·2
25	15 19	457	02 44	217	240	13 47	20·4	02 23	−3·5	23·9	16 41	1170	02 53	836	334	5,5,3,4,4,4,2,3	30	1	90·0
26	23 44	405	11 45	300	105	13 28	14·7	08 05	−0·3	*15·0*	16 30	1061	23 59	962	99	3,2,3,2,3,2,2,3	20	0	89·7
27	00 15	387	07 50	290	97	13 10	15·7	03 16	−9·1	24·8	15 28	1018	02 39	882	136	4,4,3,2,1,1,1,1	17	0	89·8
28	18 18	419	23 49	278	141	14 19	21·3	23 57	−2·3	23·6	22 00	1043	23 59	927	116	1,1,1,2,2,3,2,4	16	0	90·0
29	15 49	431	02 26	253	178	12 25	21·5	03 42	−10·7	32·2	16 45	1047	00 48	875	172	4,4,2,3,3,3,2,1	22	1	90·3
30 q	20 14	386	10 27	311	*75*	12 42	16·6	06 10	−5·8	22·4	17 36	1017	04 08	986	31	1,2,2,2,2,1,1,1	12	0	90·5
31	17 39	444	10 46	322	122	13 21	20·6	07 38	−5·0	25·6	20 03	1092	12 08	976	116	1,2,2,2,3,3,3,3	19	1	90·4
Mean	- -	480	- -	168	312	- -	24·8	- -	−14·8	39·7	- -	1113	- -	881	232	-	-	0·87	89·7

q denotes an international quiet day and d an international disturbed day.

TERRESTRIAL MAGNETIC FORCE: HORIZONTAL COMPONENT

Mean values for periods of sixty minutes ending at exact hours, G.M.T.

41 LERWICK (H) — 14,000γ (0·14 C.G.S. unit) + — SEPTEMBER 1947

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1 q	371	372	376	374	369	359	351	334	314	303	305	315	325	343	357	372	382	388	401	416	394	379	383	379	361
2	377	378	376	373	370	366	355	339	321	303	300	309	326	350	369	375	376	380	393	396	393	394	386	387	362
3 d	388	366	352	361	383	368	370	354	260	227	289	311	289	319	361	465	498	577	639	518	265	208	-71	174	345
4	383	271	307	330	339	296	250	283	285	281	288	306	322	353	368	362	370	417	409	400	382	369	358	341	336
5	287	300	349	353	359	356	347	324	315	306	293	299	344	348	363	379	393	388	383	382	396	397	386	375	351
6	371	374	368	363	363	361	350	332	329	325	323	336	357	367	386	454	530	587	613	547	402	368	361	345	*396*
7	301	184	290	322	307	354	347	318	311	304	296	296	319	319	406	459	491	441	531	346	120	137	173	127	313
8	22	274	353	365	361	361	361	361	350	344	337	336	335	340	332	340	351	353	365	372	373	365	363	361	337
9 q	362	361	357	358	358	358	352	347	337	325	317	315	321	325	340	354	365	372	383	391	386	369	366	365	353
10 q	372	365	365	364	365	366	361	350	333	321	315	315	318	326	335	344	354	368	376	380	384	386	383	383	355
11	380	379	379	379	376	376	371	358	340	327	322	326	329	318	360	343	468	483	421	421	397	373	332	369	372
12	379	376	360	368	379	383	382	365	336	322	330	334	343	349	357	363	385	402	406	419	431	360	323	392	369
13	248	213	103	257	295	269	274	269	260	251	241	272	364	413	337	360	369	387	385	392	343	172	251	308	293
14 d	301	195	291	275	214	302	285	223	243	253	246	262	390	377	404	393	570	524	391	387	379	211	265	237	317
15 d	240	47	223	239	296	345	336	273	262	270	275	326	348	349	381	578	444	509	437	376	286	157	339	354	320
16	348	321	343	361	359	335	321	321	340	333	322	318	326	332	345	356	369	423	391	387	379	334	280	123	336
17	296	185	71	274	356	337	330	332	322	319	312	317	326	357	396	507	552	494	435	383	350	250	233	148	328
18	213	261	220	235	353	349	331	327	296	300	301	317	344	362	378	356	389	475	398	398	352	366	224	201	323
19	363	353	329	311	337	361	331	339	318	325	323	319	342	365	345	376	392	397	390	384	380	358	327	248	346
20	318	344	350	354	351	340	350	365	354	340	329	324	335	340	376	379	426	411	387	375	372	367	344	334	357
21	348	361	365	323	326	364	362	372	351	330	327	322	331	343	365	369	386	408	412	376	372	355	337	351	357
22	368	368	366	362	357	349	340	322	330	296	286	297	324	346	358	400	476	393	381	399	337	280	298	258	345
23	121	325	365	365	324	271	357	336	321	310	308	296	318	332	329	334	341	346	361	368	371	375	374	377	330
24 d	380	364	379	370	368	368	362	343	332	322	311	320	395	565	846	909	961	717	152	-79	-33	-188	38	-307	341
25 d	-331	-241	-137	8	2	9	5	226	311	328	354	365	350	404	485	524	592	585	466	408	351	271	190	314	*243*
26	298	249	191	315	354	353	347	334	325	314	309	314	322	344	342	361	367	355	357	371	363	365	374	357	333
27	358	340	340	340	354	355	349	342	332	326	322	325	335	357	350	361	357	357	365	372	372	371	365	361	350
28 q	354	361	371	365	364	358	351	341	328	320	307	315	330	333	349	354	372	383	384	383	379	383	367	365	355
29 q	367	363	369	361	358	355	354	344	332	322	325	313	310	321	334	351	373	389	380	377	380	366	344	297	349
30	363	362	366	373	366	366	367	362	347	332	317	308	309	312	325	341	355	362	385	409	421	383	391	387	359
Mean	298	292	305	327	335	336	332	328	318	309	308	314	334	354	379	408	435	*436*	406	382	349	309	303	*290*	341

MAGNETIC DECLINATION (WEST)

Mean values for periods of sixty minutes ending at exact hours, G.M.T.

42 LERWICK (D) — 11° + — SEPTEMBER 1947

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′
1 q	1·2	3·4	0·1	0·4	-0·2	0·4	0·0	0·3	1·5	4·0	10·3	16·0	19·5	20·4	18·1	14·8	12·5	10·9	11·9	12·7	9·4	9·0	7·0	6·2	7·9
2	6·4	5·5	4·1	3·4	2·1	0·7	-0·6	-1·4	0·5	2·7	7·0	14·0	17·4	16·9	13·6	10·8	7·4	7·3	8·2	9·1	9·9	11·4	8·1	4·7	7·0
3 d	3·0	-0·5	-3·0	-3·3	-8·1	-3·9	-6·7	-10·9	-23·1	4·7	26·2	20·4	21·3	21·2	13·4	8·0	14·3	16·8	26·0	22·4	11·6	4·2	18·0	-2·0	7·1
4	-0·5	10·3	1·4	-3·5	-0·6	-1·4	-0·3	1·0	2·9	5·7	8·0	11·9	14·7	16·6	15·9	15·7	13·4	14·4	11·9	4·5	6·3	6·4	4·3	3·8	6·8
5	3·1	7·9	2·4	1·7	2·4	3·5	1·7	-1·3	1·6	4·3	10·0	14·8	18·7	16·6	15·5	10·8	5·1	4·3	8·1	10·6	11·0	9·9	10·0	8·9	7·6
6	5·2	1·0	0·5	0·3	0·7	-1·2	-3·4	-4·3	-1·2	1·4	6·2	12·8	18·6	20·9	20·3	20·6	18·8	19·3	21·9	19·9	4·7	7·3	7·9	3·3	8·4
7	-10·6	-2·8	-2·2	-0·3	4·2	-0·5	0·5	0·0	0·5	4·7	9·1	13·6	17·8	18·2	21·4	14·8	17·8	17·7	17·2	5·5	7·0	9·2	6·2	1·4	7·1
8	-15·8	-7·4	-3·0	1·7	3·8	2·6	-1·1	-2·6	-3·3	1·6	6·1	11·0	14·7	15·7	13·4	11·1	9·9	8·0	7·0	7·1	8·1	9·3	8·1	7·3	4·7
9 q	4·9	2·4	3·5	3·1	2·7	2·2	-0·4	-1·4	-1·4	1·2	5·8	10·5	13·3	14·7	14·5	13·0	11·0	8·7	8·4	8·8	9·2	9·9	7·6	6·0	6·6
10 q	4·3	2·5	3·2	2·5	3·3	1·5	-0·3	-1·4	-0·8	1·3	4·4	9·8	12·8	14·6	13·9	12·1	9·8	8·6	8·1	8·1	8·4	8·4	8·0	7·3	6·3
11	6·5	6·2	5·8	4·9	3·8	2·4	0·3	-2·3	-0·3	3·2	8·9	14·8	18·6	18·7	17·5	13·6	17·8	10·8	9·1	3·2	5·2	7·0	3·3	3·7	7·6
12	6·7	6·2	5·1	3·2	1·6	0·3	-1·4	-1·5	0·5	7·8	10·1	13·8	14·6	12·8	10·8	8·4	7·1	6·8	10·1	14·8	16·7	6·4	5·2	-0·6	6·9
13	-3·5	-15·6	-11·0	-5·5	3·3	12·4	12·4	4·8	12·8	14·8	16·0	14·6	14·0	16·7	12·0	10·0	3·9	6·2	8·3	4·4	5·2	-12·2	-13·4	-4·3	4·4
14 d	1·3	3·2	-12·0	-7·1	1·5	10·9	10·2	8·3	8·3	8·3	11·3	16·5	19·3	13·2	15·7	11·0	13·0	-1·8	6·0	8·3	0·2	10·0	-6·0	-2·4	6·1
15 d	-8·2	2·2	-4·2	3·3	1·6	-2·3	-0·7	0·5	7·8	10·0	10·6	11·0	13·6	14·8	16·7	13·8	8·1	16·5	11·8	12·9	-5·4	-2·2	6·6	5·2	6·0
16	6·3	9·3	6·0	3·0	2·5	1·6	4·0	4·3	4·3	6·7	9·4	12·5	13·9	12·9	12·9	9·8	6·2	6·1	5·8	7·3	-0·5	0·6	2·1	4·3	6·3
17	-6·4	-2·1	1·4	1·4	-1·4	3·3	2·5	4·2	5·2	4·3	8·3	9·1	15·7	15·9	15·6	11·8	8·6	13·8	11·7	0·3	4·4	4·6	-4·7	10·0	5·7
18	-1·3	-4·5	-5·4	-0·5	-2·4	4·5	7·3	3·4	3·4	8·6	11·0	13·5	15·7	13·0	13·0	13·7	11·7	0·8	12·7	5·3	6·3	5·1	9·8	-1·3	5·9
19	4·3	5·4	9·1	13·7	10·2	5·5	7·1	7·2	9·1	8·3	9·4	10·5	13·9	15·3	17·6	17·9	11·4	3·8	11·1	1·5	0·8	2·4	7·4	6·3	8·7
20	-1·2	1·5	7·1	7·3	8·5	12·0	11·1	4·0	4·2	4·4	5·5	8·1	11·5	12·8	13·0	13·3	3·9	8·3	8·1	7·9	5·9	3·0	-5·9	-4·7	6·2
21	2·5	5·0	7·2	11·6	14·4	14·4	10·9	11·4	1·6	4·4	7·0	9·1	12·8	14·3	14·4	15·1	10·6	5·9	0·9	6·8	3·9	2·0	2·6	2·5	8·0
22	4·4	5·3	6·0	6·1	7·0	11·2	8·2	14·2	11·2	1·5	11·1	12·4	15·3	18·1	17·7	18·2	5·3	11·6	9·5	0·7	-0·7	-6·4	-0·5	-4·4	7·6
23	-4·5	-0·5	2·9	5·8	3·9	23·6	14·4	6·5	11·5	11·6	14·1	16·2	17·0	16·8	14·5	12·2	9·1	8·0	8·7	8·2	7·9	7·3	5·7	5·7	9·4
24 d	-4·3	-6·0	0·0	7·3	13·8	9·4	12·1	7·7	8·1	9·4	11·3	13·3	16·0	16·3	14·4	42·0	36·2	53·5	19·2	2·5	5·8	-9·3	-6·1	14·9	*12·0*
25 d	-36·9	-54·2	-46·0	-31·0	11·0	-0·6	-12·3	-19·0	-6·4	-0·4	13·4	15·8	17·3	21·4	22·0	22·0	18·3	20·7	9·1	8·4	-5·3	-1·7	-7·1	3·0	*-1·6*
26	1·3	3·1	3·4	-5·1	-2·9	-0·4	0·6	0·3	14·3	4·7	9·0	12·5	13·6	14·5	11·7	10·6	9·9	9·3	9·1	6·2	7·3	8·7	0·6	-2·5	5·8
27	4·6	0·5	-13·8	-8·6	-4·2	-0·5	-1·2	0·6	1·7	3·3	7·1	11·9	15·3	15·4	11·5	9·4	6·9	6·3	8·3	9·6	9·3	7·7	4·4	1·6	4·4
28 q	3·3	1·1	0·6	1·4	2·5	2·5	1·4	0·1	-0·4	1·4	4·4	10·1	15·8	14·0	12·6	9·1	9·4	9·6	9·9	10·2	11·7	5·1	2·2	3·0	5·9
29 q	3·5	4·1	2·6	2·4	4·2	0·7	-1·7	-1·8	-0·8	4·3	8·4	9·8	11·1	11·5	12·0	11·3	8·2	6·8	7·3	7·8	7·3	1·3	-1·8	-5·1	4·7
30	-3·3	3·6	5·8	2·5	2·5	2·5	2·3	0·1	-1·6	-0·3	1·5	5·5	8·9	10·6	11·8	11·4	10·5	9·3	12·0	17·7	8·2	8·2	8·1	6·3	6·0
Mean	-0·8	-0·1	*-0·8*	0·7	3·1	3·9	2·6	1·0	2·4	4·9	9·4	12·5	15·4	*15·8*	14·9	13·9	11·2	10·9	10·6	8·4	6·0	4·4	3·3	2·9	6·5

TERRESTRIAL MAGNETIC FORCE: VERTICAL COMPONENT

Mean values for periods of sixty minutes ending at exact hours, G.M.T.

43 LERWICK (V) — 46,000γ (0·46 C.G.S. unit) + — SEPTEMBER 1947

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1 q	999	985	982	999	1004	1006	1013	1013	1012	1005	991	982	986	993	998	1004	1010	1010	1005	1013	1030	1022	1010	1005	1003
2	1005	1006	1008	1010	1011	1010	1011	1012	1011	1005	992	982	987	992	997	1000	1004	1002	999	1001	1000	998	1001	998	1002
3 d	991	980	939	951	958	1000	1005	1004	1013	1012	1051	1059	1036	1053	1102	1139	1154	1125	1041	981	1010	988	897	784	1011
4	759	814	920	963	1010	999	1003	1007	1017	1029	1022	1021	1017	1012	1025	1024	1024	1029	1055	1083	1055	1036	1016	981	997
5	894	936	964	987	1007	1014	1007	1012	1017	1021	1026	1018	1013	1045	1060	1058	1071	1070	1052	1034	1019	1012	1004	1000	1014
6	1000	1002	1012	1012	1014	1022	1025	1030	1023	1016	1004	993	997	1009	1030	1059	1119	1141	1165	1113	1080	1040	1022	987	*1038*
7	921	943	927	940	950	958	992	1011	1023	1023	1018	1021	1019	1031	1047	1107	1125	1117	1106	1012	928	1030	1025	1031	1013
8	997	909	974	1011	1023	1028	1029	1030	1029	1017	1013	1013	1010	1006	1012	1016	1018	1020	1018	1019	1019	1018	1017	1017	1011
9 q	998	1011	1016	1013	1013	1015	1018	1020	1023	1023	1019	1014	1014	1011	1011	1012	1017	1017	1013	1017	1020	1026	1025	1022	1016
10 q	1004	1006	1010	1009	1009	1011	1012	1013	1015	1015	1011	1007	1005	1005	1005	1005	1006	1005	1004	1005	1005	1005	1008	1008	1008
11	1008	1006	1005	1005	1006	1008	1011	1011	1011	1010	1006	1006	1017	1029	1034	1044	1036	1129	1125	1076	1043	1023	950	980	1024
12	1001	1011	998	995	1005	1005	1003	1005	1006	1010	1006	998	999	1002	1010	1012	1017	1029	1036	1060	1078	1041	1011	1014	1015
13	988	927	958	886	885	863	879	955	986	1017	1042	1086	1148	1165	1148	1113	1103	1078	1071	1062	1004	929	835	908	1001
14 d	946	879	899	919	909	889	945	943	933	964	1035	1078	1100	1099	1088	1119	1142	1143	1095	1055	1068	964	878	796	995
15 d	890	891	885	922	912	970	998	1011	1011	998	1018	1046	1062	1076	1090	1144	1154	1130	1128	1076	929	915	982	992	1010
16	1000	976	986	1013	1020	1027	1023	1022	1016	1014	1017	1022	1017	1017	1022	1028	1035	1054	1083	1070	1052	962	891	873	1010
17	849	820	869	830	939	973	999	1004	1005	1004	1016	1048	1066	1082	1089	1152	1174	1170	1068	1089	1016	964	871	864	998
18	831	832	868	858	906	927	968	1011	1023	1026	1036	1065	1058	1086	1082	1070	1066	1100	1034	1052	957	968	918	849	983
19	963	987	988	970	940	988	1007	1020	1023	1036	1047	1047	1053	1059	1060	1053	1083	1087	1046	1032	994	976	970	867	1012
20	873	952	980	992	995	994	981	996	1006	1018	1033	1033	1029	1036	1048	1071	1084	1077	1059	1057	1040	1030	999	993	1016
21	975	994	999	976	927	921	951	965	994	1017	1016	1022	1023	1036	1064	1071	1071	1086	1089	1070	1052	1041	980	927	1011
22	983	1000	1005	1005	1006	974	980	992	981	1014	1022	1028	1030	1041	1076	1096	1134	1077	1053	1046	993	950	939	876	1013
23	816	914	990	1004	975	839	876	951	987	1011	1031	1038	1034	1028	1023	1018	1012	1010	1007	1008	1010	1007	1010	1001	*983*
24 d	958	962	963	966	956	963	962	992	999	1022	1040	1072	1116	1167	1006	875	827	1007	983	862	1106	1068	1140	1271	1012
25 d	803	1100	932	775	646	763	836	947	1000	1009	1010	1034	1077	1074	1092	1122	1160	1168	1160	1092	1026	946	910	962	985
26	972	960	919	967	1008	1020	1025	1030	1031	1031	1031	1028	1024	1025	1031	1037	1048	1047	1036	1041	1040	1038	1026	1024	1018
27	1032	1022	971	988	1010	1019	1023	1022	1021	1021	1020	1017	1015	1014	1022	1024	1025	1022	1017	1016	1019	1029	1032	1030	1018
28 q	1017	991	1005	1015	1020	1022	1024	1024	1022	1017	1019	1012	1011	1010	1011	1017	1017	1028	1029	1026	1034	1026	1024	1022	1019
29 q	1022	1012	1010	1011	1004	1006	1008	1009	1006	1003	998	1006	1011	1012	1019	1029	1041	1047	1044	1040	1030	1027	999	933	1014
30	951	981	980	981	998	1006	1010	1016	1020	1022	1017	1016	1017	1018	1017	1018	1018	1016	1006	1004	1065	1055	1040	1046	1013
Mean	*948*	960	965	966	969	975	987	1003	1009	1014	1020	1027	1033	1041	1044	1051	1060	*1068*	1054	1037	1024	1005	981	969	1009

DAILY EXTREMES OF TERRESTRIAL MAGNETIC ELEMENTS, MAGNETIC CHARACTER FIGURES AND TEMPERATURE IN MAGNET HOUSE

44 LERWICK — SEPTEMBER 1947

	TERRESTRIAL MAGNETIC ELEMENTS												3-hr. range indices K	Sum of K indices	Magnetic character of day (0-2)	Temperature in magnet house 200 +
	Horizontal force					Declination			Vertical force							
	Maximum 14,000γ +		Minimum 14,000γ +		Range	Maximum 11° +		Minimum 11° +		Range	Maximum 46,000γ +		Minimum 46,000γ +		Range				
	h. m.	γ	γ	h. m.	γ	h. m.		h. m.			h. m.	γ	γ	h. m.	γ				°A.
1 q	19 13	430	293	10 28	137	13 10	21·9	−2·8	03 36	24·7	20 06	1038	970	01 46	68	2,2,3,3,2,1,3,2	18	0	90·2
2	23 30	405	296	10 16	109	12 58	18·4	−2·3	07 42	20·7	07 35	1015	981	11 28	34	1,1,3,2,3,1,1,3	15	0	89·8
3 d	18 50	719	−416	22 21	1135	22 34	45·0	−36·9	08 28	81·9	16 26	1172	684	23 46	488	3,4,6,5,5,6,7,8	44	2	89·5
4	17 26	437	33	00 05	404	14 08	21·5	−12·7	00 37	34·2	19 19	1096	703	00 30	393	6,4,4,3,4,4,3,5	33	1	89·2
5	17 05	424	253	01 01	171	12 39	20·2	−6·2	00 37	26·4	16 40	1077	875	00 54	202	4,3,2,2,3,3,3,3	23	1	89·8
6	17 54	645	314	10 22	331	18 55	33·9	−6·6	06 52	40·5	18 34	1192	964	23 59	228	2,1,2,2,3,5,6,4	25	1	89·1
7	18 55	656	−47	23 45	703	14 52	25·1	−15·5	00 30	40·6	16 45	1153	875	20 22	278	5,3,3,2,5,5,8,6	37	1	88·9
8	02 02	394	−113	00 22	507	13 05	16·7	−30·1	00 41	46·8	00 31	1081	873	01 22	208	7,3,3,3,2,2,2,1	23	1	89·5
9 q	19 57	394	311	10 42	83	13 48	15·2	−2·2	07 39	17·4	21 45	1030	980	00 38	50	3,1,1,2,2,2,2,2	15	0	90·0
10 q	21 25	390	314	11 25	76	13 33	14·8	−1·7	08 08	*16·5*	07 58	1016	988	00 50	*28*	1,1,2,1,1,2,1,1	10	0	89·2
11	17 14	538	304	11 01	234	16 35	20·8	−4·5	19 47	25·3	17 50	1168	915	22 40	253	0,1,2,3,3,5,4,4	22	1	89·2
12	20 17	491	249	23 51	242	20 21	21·5	−5·4	06 02	26·9	20 15	1107	986	03 30	121	2,2,3,3,2,3,4,4	23	1	89·0
13	13 07	459	37	02 20	422	05 58	20·3	−40·5	22 10	60·8	12 59	1179	767	22 17	412	6,5,5,4,5,3,5,6	39	1	89·0
14 d	16 51	793	68	21 35	725	21 34	24·4	−20·7	22 47	45·1	16 45	1208	744	23 12	464	5,5,4,5,4,7,5,6	42	2	88·8
15 d	15 32	789	−113	21 18	902	21 20	53·6	−20·1	20 29	73·7	15 28	1226	753	21 16	473	7,5,4,4,4,7,6,7	44	2	90·0
16	17 57	437	−99	23 29	536	23 38	15·1	−7·5	20 58	22·6	18 58	1094	802	23 30	292	3,3,3,2,2,4,4,7	28	1	89·1
17	18 09	650	−106	02 38	756	18 23	47·2	−17·7	22 34	64·9	15 48	1203	691	02 56	512	7,6,4,3,4,5,6,6	41	2	89·1
18	17 20	521	−134	22 58	655	22 54	34·6	−22·3	01 07	56·9	17 38	1166	713	23 03	453	5,6,3,4,4,5,5,7	39	1	89·7
19	15 46	413	278	23 15	135	03 57	21·2	−8·1	20 27	29·3	16 57	1117	830	23 55	287	3,4,3,2,3,3,4,5	27	1	89·8
20	16 48	471	246	00 01	225	15 06	15·6	−12·7	22 54	28·3	16 41	1107	843	00 10	264	5,3,3,2,3,4,2,3	25	1	89·4
21	18 08	430	282	23 04	148	05 35	17·6	−11·4	23 12	29·0	17 44	1106	891	23 20	215	2,4,3,2,3,3,4,5	26	1	89·8
22	16 34	531	193	23 59	338	16 07	20·5	−15·9	19 51	36·4	16 25	1176	845	23 07	331	3,3,3,3,3,5,4,5	29	1	89·5
23	23 41	383	−79	00 21	462	05 16	30·7	−9·9	00 03	40·6	11 19	1051	782	00 12	269	7,5,5,3,4,2,2,2	30	1	89·9
24 d	15 50	*1223*	*−609*	23 33	*1832*	15 34	*149·2*	−36·4	23 22	*185·6*	23 34	*1491*	*463*	15 35	*1028*	3,4,4,4,8,7,9,7	46	2	88·1
25 d	17 19	669	−546	00 19	1215	17 42	39·2	*−103·4*	02 43	142·6	01 53	1233	531	04 34	702	7,7,6,4,5,5,5,6	45	2	88·1
26	22 32	387	148	02 32	239	13 21	16·6	−10·9	02 32	27·5	16 57	1053	843	02 28	210	5,4,2,1,2,2,2,3	21	1	89·0
27	21 09	377	314	10 42	*63*	13 28	17·6	−19·7	02 29	37·3	22 06	1040	957	02 37	83	4,3,2,2,3,2,2,2	20	1	89·1
28 q	21 25	397	300	10 49	97	12 06	19·2	−2·3	02 47	21·5	20 52	1042	984	01 23	58	3,2,2,3,2,2,1,2	17	0	88·8
29 q	17 23	398	257	23 38	141	14 56	13·5	−11·0	23 52	24·5	17 55	1051	894	23 39	157	1,2,2,2,2,3,1,5	18	1	88·0
30	20 28	452	301	11 47	151	20 16	20·0	−10·1	00 01	30·1	20 36	1095	921	00 01	174	3,2,1,2,2,2,4,2	18	1	83·9
Mean	- -	523	84	- -	439	- -	28·4	−16·9	- -	45·3	- -	1126	835	- -	291	-	-	1·03	89·1

q denotes an international quiet day and d an international disturbed day.

TERRESTRIAL MAGNETIC FORCE: HORIZONTAL COMPONENT

Mean values for periods of sixty minutes ending at exact hours, G.M.T.

45 LERWICK (H) — 14,000γ (0·14 C.G.S. unit) + — OCTOBER 1947

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1	382	354	286	272	267	349	376	337	323	320	311	289	293	329	347	343	365	377	390	417	409	460	349	247	341
2 d	293	242	258	273	283	299	289	298	299	290	286	331	397	446	505	674	562	564	498	315	221	150	-46	-122	317
3	-144	172	135	147	58	270	319	343	327	319	319	316	330	381	363	342	337	344	354	359	358	325	312	349	*281*
4	356	354	349	358	357	358	362	352	333	321	308	304	305	316	335	347	355	361	368	369	366	366	363	366	347
5	363	363	365	365	365	369	371	355	344	327	319	309	322	329	347	351	359	369	374	373	377	373	372	376	356
6	375	375	373	372	372	374	373	364	350	326	310	299	314	332	329	354	356	367	375	379	380	369	368	376	357
7	375	375	373	375	376	373	374	373	366	337	315	315	315	322	333	347	378	405	389	397	407	350	369	369	363
8	363	362	363	365	365	376	376	373	362	333	327	314	320	344	358	344	355	376	376	365	373	372	376	368	359
9 d	352	226	313	336	365	376	362	355	337	325	314	308	329	384	419	507	545	612	462	419	402	320	264	182	367
10 d	147	15	198	338	325	320	308	298	267	276	306	347	361	323	415	446	540	393	350	330	223	114	17	255	288
11	271	138	186	181	273	306	329	308	308	305	302	319	355	361	385	514	488	429	422	434	326	187	208	198	314
12 d	87	138	224	353	349	313	224	239	281	295	289	296	373	448	368	372	424	394	414	301	332	344	317	321	312
13	330	318	317	358	333	324	341	329	330	329	327	312	318	326	344	355	479	478	411	359	355	329	304	272	345
14	190	293	340	361	361	282	257	338	345	312	299	306	336	340	378	356	369	348	378	350	260	279	258	208	314
15 d	345	358	354	352	340	315	336	364	340	332	324	337	302	358	402	427	434	416	376	356	346	354	368	238	353
16	340	327	336	326	343	362	351	345	342	329	315	315	334	347	360	430	373	370	357	356	358	363	361	351	350
17	321	314	347	343	361	372	367	355	341	329	313	319	340	333	351	373	369	366	369	358	358	362	365	369	350
18	360	354	354	354	355	366	365	365	337	312	316	322	329	341	351	373	372	366	373	362	358	357	344	365	352
19	356	358	358	357	359	358	369	369	343	311	291	310	341	322	359	402	411	478	519	363	307	347	347	339	361
20	336	284	286	347	362	359	344	339	326	323	319	316	326	323	343	368	369	368	362	369	335	345	315	295	336
21	294	328	343	347	355	362	358	351	343	332	322	316	311	324	336	350	360	358	362	363	366	371	372	350	345
22	355	366	369	369	362	369	373	366	347	333	329	329	319	337	329	344	354	362	369	373	376	373	373	365	356
23	361	365	369	369	369	347	369	365	352	334	328	313	312	336	362	373	379	398	377	376	350	358	361	351	357
24	324	321	337	351	356	359	358	358	354	330	315	323	330	340	343	351	362	373	377	382	383	373	364	363	351
25	376	361	363	366	365	365	367	363	354	341	331	328	332	340	346	356	370	373	381	381	372	375	374	372	361
26 q	370	370	371	372	372	375	366	365	358	340	328	326	335	345	358	363	369	374	379	382	379	379	378	375	364
27 q	373	371	372	373	373	373	372	364	350	333	324	329	339	352	362	367	372	373	376	380	382	382	382	382	365
28 q	381	377	379	379	378	377	374	367	357	347	340	338	343	350	358	363	367	373	377	381	385	386	386	384	369
29 q	381	379	379	381	380	380	376	370	358	344	338	340	348	358	363	364	377	386	377	383	382	381	381	380	370
30 q	377	377	377	379	379	379	376	374	367	354	343	337	345	351	364	373	382	370	377	379	380	380	384	383	370
31	383	382	379	380	380	376	370	370	364	351	349	356	361	357	366	377	380	381	379	382	382	382	374	375	*372*
Mean	315	*313*	327	342	343	351	350	349	339	325	318	320	333	348	364	387	*397*	397	389	371	355	342	325	316	347

MAGNETIC DECLINATION (WEST)

Mean values for periods of sixty minutes ending at exact hours, G.M.T.

46 LERWICK (D) — 11° + — OCTOBER 1947

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	5-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′
1	-9·1	-4·6	-7·6	-15·5	-6·1	3·2	4·3	1·6	-0·3	1·6	8·3	9·6	10·9	13·9	14·6	11·5	11·3	10·1	10·0	20·6	10·1	22·7	0·9	-3·2	4·9
2 d	-13·2	-14·2	-15·9	-11·4	-7·5	-2·2	-3·7	-0·1	4·4	5·6	14·9	18·5	20·6	20·6	17·7	12·0	21·0	17·7	32·0	2·5	6·3	-5·6	-18·0	-15·4	3·6
3	-28·9	-3·2	-22·2	-11·9	-3·8	-9·7	-0·8	-4·2	-6·1	-2·3	3·7	8·1	10·6	17·2	12·0	10·2	7·7	6·7	6·8	7·4	8·2	8·0	-7·8	-1·3	*0·2*
4	1·0	2·2	3·9	3·9	1·9	1·1	-1·3	-2·7	-3·2	-2·0	2·6	8·5	12·5	13·8	14·7	12·8	9·8	8·3	8·7	8·2	6·9	5·5	4·6	4·1	5·2
5	3·9	4·3	4·4	4·9	3·7	3·6	2·7	-0·5	-1·1	0·4	4·7	8·3	13·0	14·1	15·5	12·6	10·4	10·0	8·2	8·1	8·1	5·5	3·4	0·8	6·2
6	2·5	2·6	4·1	2·7	4·2	4·3	2·3	-0·4	-1·9	-1·1	2·6	7·3	13·1	15·8	15·7	14·3	11·4	9·6	9·4	8·4	8·0	2·8	3·6	3·5	6·0
7	3·3	4·1	4·2	4·7	4·6	4·2	3·8	1·1	-0·3	0·9	4·4	7·3	10·5	12·1	13·6	13·5	13·4	15·7	12·0	15·3	4·4	-9·3	4·4	5·3	6·4
8	3·9	1·7	3·6	0·8	3·8	2·4	3·4	3·4	3·4	1·8	5·4	8·4	12·3	15·8	14·9	12·1	11·5	8·9	10·2	9·5	9·5	8·1	6·5	3·8	6·8
9 d	-4·2	-5·7	-8·0	-8·9	0·3	2·0	5·9	10·1	13·9	10·4	11·1	14·7	18·5	18·2	15·3	11·1	26·7	29·7	17·7	13·7	6·5	0·4	0·1	-13·9	7·7
10 d	-11·1	-7·2	-7·0	-4·0	-4·1	2·5	6·3	7·3	3·0	5·3	12·9	12·2	14·7	17·1	18·8	18·1	12·5	11·4	9·4	8·7	-9·1	2·1	-23·1	-8·9	3·7
11	-1·9	-7·4	-2·6	-3·7	5·5	2·0	5·7	3·5	1·9	6·1	8·0	9·0	13·2	15·6	18·2	1·5	5·7	13·6	9·0	14·2	2·2	-7·3	-5·8	-14·2	3·8
12 d	-1·9	-19·0	-7·1	2·7	2·0	4·8	17·0	24·7	8·3	5·3	7·4	10·9	14·1	15·0	12·9	9·5	2·3	7·0	-1·5	-2·3	-1·7	-1·1	2·0	1·4	4·7
13	-1·6	6·5	9·1	0·4	6·0	15·6	13·0	8·2	5·0	2·4	6·8	8·9	10·4	10·4	9·2	8·2	13·9	-0·5	-6·1	3·3	4·9	-7·4	-8·8	-7·9	4·6
14	-5·6	-0·3	9·9	4·1	3·2	1·2	27·2	9·4	3·0	5·8	7·9	12·5	14·6	14·9	14·9	9·0	8·7	4·9	-5·9	-1·5	-18·8	-14·4	-8·2	-6·1	3·8
15 d	-0·4	3·5	3·5	3·0	8·5	9·8	9·1	6·7	9·0	3·9	7·3	10·9	14·0	15·7	8·2	10·1	16·8	8·7	1·3	8·2	5·7	-6·9	7·3	1·6	6·9
16	-3·6	-4·6	0·6	4·6	6·3	7·3	5·8	6·8	5·9	4·6	6·1	8·9	11·3	14·3	13·1	2·2	8·9	7·1	5·6	7·2	6·5	4·9	4·3	7·4	5·9
17	9·1	9·1	2·5	3·7	7·2	4·9	4·9	2·6	1·6	4·4	9·0	13·1	15·7	13·2	14·1	6·7	9·9	7·7	-1·6	3·5	4·5	5·1	4·9	3·7	6·7
18	4·4	6·2	6·2	6·3	6·3	5·7	5·1	3·6	5·3	7·3	11·8	13·0	14·7	15·6	15·6	1·3	5·8	9·0	7·2	0·6	0·5	4·3	-2·1	-4·2	6·2
19	3·4	5·3	6·9	7·3	3·7	4·4	7·3	6·6	5·3	10·0	13·0	19·3	18·7	16·6	15·6	16·8	9·8	16·0	25·3	1·0	-8·2	-0·4	2·4	6·5	*8·9*
20	7·1	9·8	10·3	7·5	0·6	2·3	3·0	5·3	6·5	6·3	9·0	13·3	15·6	15·3	14·9	5·8	5·4	5·8	6·0	1·5	-0·2	-5·6	2·3	-1·5	6·1
21	-3·2	-7·4	-2·4	1·8	3·9	3·4	3·0	2·1	0·1	1·5	5·7	10·4	11·8	12·0	11·1	10·2	7·9	1·6	-1·4	4·4	6·3	5·4	2·5	0·9	3·9
22	5·3	5·5	2·2	-1·1	2·1	5·9	2·5	2·4	2·7	6·3	9·6	12·8	13·9	16·2	12·8	11·0	9·1	7·8	7·3	6·5	6·9	6·4	4·1	0·3	5·6
23	0·6	2·2	3·5	2·6	2·5	10·6	7·3	0·4	2·0	2·0	7·7	10·6	12·4	14·0	10·9	11·1	7·7	9·5	13·5	2·3	5·6	4·4	4·9	3·4	6·3
24	2·5	-6·6	-5·0	-1·9	2·1	1·9	1·5	0·0	1·5	5·1	8·4	12·9	14·4	13·3	11·6	9·7	7·7	7·6	9·1	9·1	9·0	7·2	4·9	2·7	5·4
25	-0·5	0·2	1·2	2·9	3·6	3·1	2·8	1·3	0·2	1·4	4·1	8·6	10·7	11·5	11·4	9·6	9·1	8·3	9·6	10·0	8·7	6·8	4·8	4·8	5·6
26 q	3·3	3·4	4·1	3·9	2·5	2·9	3·7	3·8	3·9	3·7	6·3	8·6	10·0	10·4	10·5	9·1	8·0	8·5	8·7	8·7	8·9	6·9	6·7	6·2	5·4
27 q	5·8	5·0	4·9	4·8	4·4	3·8	3·2	2·2	1·8	3·5	6·9	10·0	11·5	11·5	10·9	9·1	8·7	8·9	8·5	8·0	7·2	7·3	6·9	7·0	6·7
28 q	6·2	5·2	5·8	5·4	4·9	4·3	3·5	2·5	2·0	3·3	6·1	8·4	9·8	9·7	9·4	9·0	8·8	8·6	8·5	8·3	8·4	8·0	7·2	6·9	6·7
29 q	5·8	5·3	5·3	5·2	4·7	4·1	3·5	2·5	1·9	2·2	5·4	8·9	10·8	11·8	10·7	9·2	10·2	11·9	10·4	11·5	10·0	8·1	6·7	6·7	7·2
30 q	5·8	5·2	5·0	4·7	4·4	3·9	3·5	3·2	2·3	2·5	5·1	7·2	8·6	9·1	10·1	9·6	10·1	11·1	10·1	8·3	7·7	7·3	6·3	5·1	6·5
31	5·7	5·3	5·3	4·2	3·2	4·7	3·7	3·5	3·0	3·4	7·5	10·8	12·0	11·0	11·6	11·2	11·1	10·1	8·8	8·4	7·6	6·3	3·5	3·1	6·9
Mean	-0·2	0·4	0·9	1·1	2·7	3·8	5·1	3·8	2·7	3·6	7·4	10·7	13·1	*14·1*	13·2	9·9	10·4	9·7	8·3	7·2	4·5	2·8	1·0	0·3	5·7

TERRESTRIAL MAGNETIC FORCE: VERTICAL COMPONENT

Mean values for periods of sixty minutes ending at exact hours, G.M.T.

47 LERWICK (V) — 46,000γ (0·46 C.G.S. unit) + — OCTOBER 1947

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1	1044	1014	964	910	897	944	981	1007	1019	1022	1021	1030	1018	1007	1012	1019	1019	1021	1014	1019	1089	1091	980	998	1006
2 d	995	951	963	1001	934	904	911	969	987	1012	1035	1072	1117	1131	1143	1119	1155	1144	1078	1060	1041	1048	857	821	1019
3	1027	862	862	827	830	802	948	989	1015	1039	1053	1066	1060	1068	1072	1054	1042	1037	1031	1030	1027	960	911	981	*983*
4	1006	1019	1023	1015	1015	1024	1030	1034	1035	1035	1041	1031	1029	1024	1025	1030	1035	1035	1031	1028	1025	1028	1030	1020	1027
5	1023	1021	1019	1020	1024	1025	1025	1035	1038	1033	1024	1023	1017	1013	1013	1021	1019	1017	1019	1022	1024	1031	1024	1013	1023
6	997	993	1007	1013	1018	1017	1019	1024	1034	1032	1029	1018	1012	1013	1015	1025	1024	1019	1015	1013	1017	1031	1027	1012	1018
7	1011	1011	1012	1012	1011	1013	1016	1016	1015	1024	1024	1017	1012	1012	1007	1007	1015	1036	1089	1084	1084	1018	1032	1026	1025
8	1030	1023	1021	1017	1011	994	1000	1006	1014	1023	1019	1023	1021	1023	1035	1051	1036	1031	1044	1045	1029	1020	1018	1007	1023
9 d	985	890	874	892	930	965	981	988	993	1007	1023	1044	1072	1130	1127	1126	1131	1073	1117	1110	1102	989	959	952	1019
10 d	928	891	871	967	950	968	970	1006	1035	1047	1060	1086	1084	1119	1157	1173	1196	1131	1100	1073	989	821	682	806	1005
11	873	818	847	870	918	943	989	1011	1035	1036	1044	1061	1061	1081	1090	1149	1160	1164	1161	1108	994	905	915	909	1006
12 d	913	877	854	969	989	986	951	939	975	1010	1027	1037	1059	1114	1108	1078	1110	1107	1085	956	990	1007	965	946	1002
13	956	965	922	952	959	922	955	992	1008	1017	1018	1026	1030	1037	1047	1052	1084	1155	1114	1059	1042	955	914	898	1003
14	851	899	981	996	1007	963	917	959	1013	1032	1069	1057	1060	1089	1114	1110	1066	1074	1062	1001	940	926	933	817	997
15 d	937	1000	1017	1011	1012	963	974	1002	1013	1017	1024	1047	1090	1084	1113	1110	1148	1149	1128	1086	1042	1012	846	840	1028
16	922	945	950	971	971	982	1005	1013	1019	1024	1030	1048	1055	1058	1066	1112	1084	1066	1065	1047	1031	1021	1014	996	1021
17	952	928	970	964	965	986	997	1011	1018	1019	1019	1019	1031	1048	1065	1090	1072	1066	1074	1050	1048	1035	1019	1013	1019
18	1006	995	995	1005	1001	999	1011	1012	1019	1021	1013	1018	1026	1030	1036	1075	1066	1060	1066	1090	1048	1020	982	995	1025
19	995	1000	1005	993	994	1001	999	1005	1017	1018	1017	1011	1024	1048	1055	1072	1131	1173	1203	1066	974	1008	1018	998	*1034*
20	980	952	926	965	989	1014	1026	1018	1023	1029	1031	1035	1039	1047	1047	1068	1071	1059	1054	1048	1014	968	957	857	1009
21	905	928	951	978	1000	999	1017	1031	1032	1031	1026	1024	1030	1030	1024	1024	1037	1054	1059	1042	1037	1029	1013	983	1012
22	977	949	967	990	992	993	1001	1013	1018	1019	1019	1019	1021	1024	1029	1020	1018	1018	1020	1019	1019	1021	1019	995	1007
23	986	995	1009	1012	1007	998	977	993	1007	1018	1023	1029	1037	1043	1054	1066	1083	1075	1100	1087	1055	1042	1027	1007	1031
24	983	876	938	940	979	1006	1014	1021	1020	1024	1019	1013	1016	1025	1032	1025	1024	1020	1020	1019	1019	1029	1038	1036	1006
25	1008	1005	1007	1015	1016	1016	1019	1023	1024	1025	1025	1024	1019	1019	1021	1019	1017	1019	1022	1025	1032	1028	1030	1028	1020
26 q	1021	1019	1020	1018	1015	1015	1017	1011	1013	1023	1024	1017	1017	1017	1015	1014	1012	1012	1013	1011	1013	1017	1017	1017	1016
27 q	1018	1019	1020	1017	1014	1014	1017	1017	1020	1021	1018	1015	1011	1011	1011	1012	1008	1008	1010	1009	1009	1011	1009	1011	1014
28 q	1013	1015	1012	1011	1012	1013	1012	1013	1018	1012	1008	1010	1013	1012	1010	1010	1010	1008	1007	1006	1005	1004	1005	1009	1010
29 q	1013	1015	1014	1012	1009	1009	1010	1010	1013	1015	1006	1004	1003	1004	1007	1010	1006	1008	1023	1016	1016	1016	1014	1012	1011
30 q	1013	1015	1013	1010	1010	1010	1010	1007	1010	1008	1006	1005	1001	1004	1006	1014	1012	1017	1012	1012	1010	1010	1007	1009	1010
31	1010	1010	1011	1011	1011	1010	1010	1006	1004	1005	998	994	997	1006	1005	1010	1010	1009	1011	1010	1010	1014	1024	1017	1009
Mean	980	*965*	969	980	983	984	994	1006	1016	1023	1026	1030	1035	1044	1051	1057	*1061*	1060	1060	1040	1025	1004	977	969	1014

DAILY EXTREMES OF TERRESTRIAL MAGNETIC ELEMENTS, MAGNETIC CHARACTER FIGURES AND TEMPERATURE IN MAGNET HOUSE

48 LERWICK — OCTOBER 1947

	TERRESTRIAL MAGNETIC ELEMENTS																3-hr. range indices K	Sum of K indices	Magnetic character of day (0-2)	Temperature in magnet house 200 +
	Horizontal force					Declination					Vertical force									
	Maximum 14,000γ +		Minimum 14,000γ +		Range	Maximum 11° +		Minimum 11° +		Range	Maximum 46,000γ +		Minimum 46,000γ +		Range				
	h. m.	γ	γ	h. m.	γ	h. m.	′	′	h. m.	′	h. m.	γ	γ	h. m.	γ					°A.
1	22 03	529	152	23 49	377	21 32	42·4	-20·9	03 19	63·3	21 38	1142	856	04 33	286	5,5,4,3,3,3,4,6	33	1	85·6
2 d	15 05	777	-278	23 45	*1055*	18 41	63·5	-78·1	23 45	*141·6*	17 37	1178	664	22 38	514	4,5,4,4,6,6,7,7	43	2	85·6
3	13 15	427	*-408*	00 10	835	00 09	45·5	*-81·8*	00 45	127·3	00 19	*1234*	656	00 55	578	7,7,4,3,4,2,2,5	34	2	84·7
4	18 03	379	297	12 26	82	14 34	15·8	-5·6	07 40	21·4	10 06	1044	995	00 01	49	2,2,2,2,2,2,1,1	14	0	85·2
5	23 11	384	303	11 02	81	14 37	16·7	-2·6	22 59	19·3	08 32	1039	1000	23 59	39	1,1,2,2,2,2,1,2	13	0	85·4
6	20 05	389	295	11 02	94	13 15	19·5	-3·8	08 59	23·3	21 50	1041	989	01 32	52	2,2,2,2,3,2,1,3	17	1	85·2
7	20 30	466	303	10 58	163	17 32	20·5	-14·6	21 19	35·1	20 30	1120	993	21 22	127	1,1,2,2,2,3,4,4	19	1	85·2
8	17 50	390	308	11 18	82	14 09	19·1	-0·9	03 38	20·0	15 28	1059	982	23 59	77	2,2,2,2,3,3,2,3	19	1	84·5
9 d	17 51	*866*	117	23 02	749	17 58	*86·7*	-22·2	20 58	108·9	18 45	1167	761	17 55	406	5,4,3,3,5,7,6,5	38	2	85·5
10 d	16 50	600	-180	01 03	780	14 31	24·8	-38·6	22 34	63·4	16 50	1229	*638*	22 53	*591*	7,4,4,4,5,5,6,7	42	2	85·0
11	19 56	574	52	02 54	522	19 59	28·6	-25·2	01 30	53·8	16 18	1179	784	01 45	395	6,6,3,3,3,5,6,5	37	1	85·2
12 d	18 42	520	-207	00 07	727	07 09	35·8	-28·8	02 22	64·6	13 20	1135	784	02 24	351	7,4,5,3,5,4,6,4	38	1	85·0
13	18 13	568	134	23 59	434	16 30	21·6	-32·6	21 34	54·2	17 24	1178	843	21 46	335	4,4,3,2,2,5,5,5	30	1	85·1
14	19 00	399	62	23 07	337	06 09	32·0	-26·1	20 25	58·1	14 44	1124	768	23 16	356	6,4,5,3,4,3,5,6	36	1	85·3
15 d	16 56	448	147	23 16	301	22 46	26·3	-16·5	22 07	42·8	16 33	1163	773	23 02	390	4,4,4,3,5,4,4,6	34	1	85·1
16	15 36	473	291	11 01	182	15 02	16·2	-8·9	15 31	25·1	15 25	1140	886	00 01	254	3,3,3,3,3,4,3,3	25	1	85·6
17	16 18	387	276	01 02	111	11 49	17·7	-7·0	18 16	24·7	15 20	1098	905	01 01	193	4,3,2,2,3,2,3,2	21	1	85·0
18	15 41	398	306	09 06	92	14 00	17·8	-12·4	22 58	30·2	19 13	1113	953	21 59	160	2,2,2,2,2,4,3,4	21	1	84·8
19	18 31	555	127	20 00	428	18 01	31·0	-28·9	19 43	59·9	18 32	1228	899	19 52	329	2,2,3,3,3,5,7,3	28	1	84·7
20	15 52	391	232	23 29	159	12 47	17·7	-19·7	21 00	37·4	15 10	1078	815	23 14	263	4,3,2,2,2,3,4,5	25	1	84·8
21	22 46	383	266	00 32	117	00 05	14·9	-16·7	00 55	31·6	17 50	1071	874	00 02	197	4,3,2,2,2,3,3,3	22	1	85·3
22	22 44	385	316	12 50	69	13 04	17·7	-2·2	23 20	19·9	14 09	1033	940	01 56	93	3,3,2,1,2,2,1,2	16	0	85·0
23	18 01	419	305	11 34	114	18 13	24·8	-10·4	19 45	35·2	18 20	1114	971	06 09	143	2,3,3,2,3,3,5,3	24	1	86·0
24	19 47	385	272	00 49	113	12 22	15·4	-9·1	01 13	24·5	22 11	1030	839	01 17	191	5,4,2,2,2,2,1,2	20	1	85·0
25	00 34	405	321	11 24	84	13 15	14·4	-10·1	00 31	24·5	20 26	1035	983	00 39	52	3,0,1,2,2,2,1,2	13	0	85·2
26 q	19 20	384	323	11 20	61	14 24	11·0	1·5	04 46	9·5	00 01	1026	1008	07 54	18	1,1,1,1,1,1,1,1	8	0	85·7
27 q	23 23	384	317	10 45	67	12 53	12·9	1·0	08 56	11·9	01 50	1023	1007	17 00	*16*	0,0,1,1,2,1,1,0	6	0	85·2
28 q	21 26	389	336	11 12	53	12 33	11·0	1·7	08 53	*9·3*	08 30	1019	1003	22 05	*16*	1,0,1,0,1,1,1,1	6	0	85·0
29 q	19 24	390	335	10 12	55	13 17	13·0	1·4	09 20	11·6	18 37	1028	1000	12 41	28	0,0,1,1,1,2,1,1	7	0	85·8
30 q	16 33	392	336	11 14	56	16 50	12·1	1·1	08 54	11·0	17 16	1020	1001	12 15	19	1,0,1,1,1,2,1,1	8	0	85·8
31	19 15	389	345	10 27	*44*	12 40	16·6	0·7	04 24	15·9	22 34	1028	992	11 47	36	1,2,2,2,2,2,1,2	14	0	85·5
Mean	- -	459	187	- -	272	- -	24·6	-16·7	- -	41·3	- -	1101	889	- -	211	-	-	0·81	85·2

q denotes an international quiet day and d an international disturbed day.

TERRESTRIAL MAGNETIC FORCE: HORIZONTAL COMPONENT

Mean values for periods of sixty minutes ending at exact hours, G.M.T.

49 LERWICK (H) — 14,000γ (0·14 C.G.S. unit) + — NOVEMBER 1947

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1	385	378	375	375	375	377	373	368	358	351	350	349	343	352	358	365	372	374	376	378	384	372	359	364	367
2	371	372	366	378	382	375	373	369	355	344	332	330	340	346	356	362	366	370	376	378	379	379	375	377	365
3 q	376	375	375	375	376	376	375	371	366	354	346	340	346	359	363	372	371	376	381	372	371	376	376	381	369
4	369	373	370	373	378	377	376	372	365	354	343	335	341	357	364	367	366	368	366	371	375	374	373	375	366
5 q	375	373	369	376	373	373	373	369	362	354	351	351	355	362	364	365	366	369	377	382	380	380	376	378	369
6 q	374	374	374	375	375	374	374	370	365	358	352	349	356	363	369	371	374	378	383	384	382	380	378	377	371
7 q	375	378	376	379	381	381	379	378	374	371	367	367	368	370	374	373	382	378	378	378	382	381	383	378	*376*
8 d	378	375	374	384	384	385	367	367	358	349	351	345	352	353	361	364	367	378	389	375	357	336	346	342	364
9 d	349	344	356	357	367	361	364	366	357	337	345	366	345	439	447	407	396	350	342	350	241	−8	−120	38	312
10 d	−74	−52	237	319	321	303	299	326	334	331	317	342	345	382	387	348	373	378	361	351	371	293	186	143	*288*
11 d	51	102	320	344	350	352	355	354	350	349	355	363	339	400	578	528	614	535	392	366	262	302	319	317	358
12	312	259	327	316	338	353	347	338	338	341	338	335	335	335	325	342	348	348	353	360	357	360	351	342	337
13	350	323	325	352	359	366	366	359	345	345	331	319	336	342	348	350	358	359	382	364	364	364	364	367	352
14	359	360	362	363	365	367	368	361	360	341	337	343	343	345	344	361	364	371	363	355	352	358	356	363	357
15	363	356	359	350	370	370	374	367	341	333	336	335	338	345	352	356	371	370	367	367	365	370	363	363	357
16	364	366	353	368	374	365	362	362	356	339	332	342	341	342	353	354	352	354	364	371	370	367	369	367	358
17	360	363	360	362	369	375	374	367	357	349	340	334	338	346	356	361	363	366	371	375	378	378	377	374	362
18	373	375	364	375	374	371	374	367	352	359	358	361	363	365	367	362	363	369	371	371	364	368	365	374	367
19 d	367	368	371	370	356	356	340	322	324	328	331	339	347	352	343	363	375	369	371	375	375	362	356	351	355
20	351	354	355	361	361	360	359	359	352	344	331	327	338	337	344	358	367	360	359	364	365	366	353	358	353
21	365	365	366	368	366	366	369	367	362	349	338	338	341	352	357	365	381	378	370	367	371	364	364	363	362
22	363	363	364	360	364	364	364	360	358	353	353	345	341	349	356	346	357	364	360	366	364	364	366	364	359
23	364	364	366	371	374	374	370	345	338	353	352	346	351	353	360	360	356	364	366	367	371	371	384	374	362
24	366	365	365	366	368	370	373	371	364	357	347	347	349	352	358	364	372	374	393	447	368	383	387	360	369
25	367	366	360	358	360	360	359	364	361	353	339	349	353	352	356	365	369	376	378	380	381	374	371	367	363
26 q	361	367	367	364	364	360	360	360	358	353	353	349	352	355	364	371	375	380	382	380	378	371	370	368	365
27	359	360	364	367	367	367	374	371	369	365	356	349	350	356	365	374	379	382	389	394	389	387	383	378	371
28	374	373	374	375	379	380	382	378	377	367	359	358	360	362	371	378	376	375	381	383	384	384	382	380	375
29	379	375	373	387	387	382	392	378	372	364	358	356	357	364	374	374	375	382	378	369	380	369	366	367	373
30	371	369	368	368	370	372	370	370	371	363	354	349	351	356	362	371	377	382	371	362	367	358	371	369	366
Mean	340	*339*	358	365	368	367	366	363	357	350	345	345	347	358	369	370	*377*	376	373	373	364	353	345	347	359

MAGNETIC DECLINATION (WEST)

Mean values for periods of sixty minutes ending at exact hours, G.M.T.

50 LERWICK (D) — 11° + — NOVEMBER 1947

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′
1	1·3	2·1	4·9	4·0	4·3	3·3	3·4	3·0	2·5	4·5	6·5	10·8	10·7	11·1	9·6	9·7	9·0	8·2	8·1	7·7	7·3	2·7	−0·5	1·8	5·7
2	4·6	3·3	6·2	3·0	0·2	2·1	2·2	3·4	2·3	4·1	5·7	8·0	9·9	10·0	9·6	8·5	8·1	7·7	7·6	7·6	7·1	6·4	5·7	5·1	5·8
3 q	5·6	5·5	5·3	5·3	5·1	4·4	4·3	3·4	2·8	3·3	6·9	8·1	9·4	9·9	9·6	10·1	9·1	8·5	8·9	6·2	5·3	5·2	3·4	1·5	6·1
4	−2·1	0·4	3·4	4·4	3·9	4·1	3·7	3·5	3·4	4·4	8·1	10·8	13·4	13·7	14·7	6·3	10·1	9·3	7·8	6·4	6·2	5·3	4·0	3·3	6·2
5 q	4·9	4·4	6·4	4·8	5·3	5·1	4·1	3·4	3·3	5·2	8·1	9·8	10·3	9·6	9·3	8·1	7·6	7·3	7·9	7·4	7·2	6·7	6·3	5·7	6·6
6 q	5·3	5·3	5·4	5·3	4·9	4·4	4·2	3·9	3·4	4·2	6·0	7·4	8·2	8·3	8·2	8·0	7·3	7·4	8·2	7·6	7·3	6·4	5·5	6·0	6·2
7 q	5·3	4·8	4·9	5·3	5·3	5·2	4·6	4·2	3·5	4·3	7·0	9·2	9·5	9·0	9·4	8·0	8·2	8·5	7·5	7·7	8·0	6·4	5·0	−0·9	6·3
8 d	1·4	−1·1	2·4	0·4	1·3	4·2	6·9	10·7	6·0	5·0	8·9	10·3	12·7	15·8	18·9	17·0	9·1	9·2	7·2	2·6	−2·4	−6·7	−1·1	−1·2	5·7
9 d	6·5	−1·3	−3·4	1·8	1·3	3·9	7·6	5·4	3·5	4·9	10·2	14·1	14·6	19·7	12·1	20·5	11·8	9·4	9·5	8·0	7·3	−29·8	−22·6	−0·1	4·8
10 d	−22·9	−25·0	−11·5	0·2	1·8	2·2	8·0	4·3	2·5	2·2	3·9	6·4	8·5	8·1	6·1	9·7	9·9	−1·8	0·0	5·6	10·8	5·7	−8·6	−3·9	*0·9*
11 d	−11·2	−9·2	−10·8	2·4	2·1	2·2	3·6	4·2	3·1	4·2	7·1	9·4	8·9	17·8	6·3	18·8	13·9	1·3	11·1	6·1	6·0	0·7	−3·0	3·7	4·1
12	0·4	0·5	−0·7	−4·4	3·7	6·0	5·6	6·5	6·0	2·8	3·7	6·6	8·9	9·0	8·5	8·0	6·3	2·2	2·4	3·7	2·3	5·1	2·5	−0·1	4·0
13	−0·4	0·9	3·4	4·6	3·6	3·3	7·3	6·8	2·5	6·8	8·0	8·4	8·0	10·2	9·6	8·0	4·6	4·2	−2·2	2·5	5·0	5·1	4·1	3·1	4·9
14	2·4	4·6	6·5	6·0	5·3	5·1	4·3	4·5	4·4	3·8	6·3	9·6	11·2	13·6	13·2	12·6	9·0	2·1	6·6	3·8	0·0	0·2	−1·4	3·2	5·7
15	4·0	4·7	6·3	8·2	3·8	5·1	4·2	5·2	5·1	4·7	6·4	9·3	9·8	11·0	10·4	8·4	8·1	8·1	4·2	6·4	5·7	4·2	1·1	−4·0	5·9
16	6·3	−0·8	−0·8	2·5	3·0	4·0	6·4	7·7	8·4	7·2	6·8	9·8	10·8	11·8	12·8	11·3	9·8	9·8	7·0	6·0	5·4	4·5	4·9	0·4	6·5
17	0·9	3·2	4·9	6·4	8·0	5·3	4·9	4·2	3·4	5·1	7·0	8·5	8·2	9·8	10·4	9·8	9·4	9·9	8·0	7·0	6·0	5·3	4·3	4·4	6·4
18	5·1	2·8	6·0	6·6	3·4	2·8	2·9	3·6	5·5	4·3	6·7	7·6	10·7	11·7	12·2	12·7	12·7	12·9	8·5	5·9	5·5	2·9	−0·3	−1·4	6·3
19 d	2·3	5·1	4·6	5·8	8·4	8·9	6·4	8·0	6·0	3·5	8·2	11·5	13·6	11·8	9·8	8·0	7·7	9·8	4·5	4·9	1·3	0·1	0·0	0·7	6·3
20	3·7	3·7	2·6	5·3	4·7	3·0	2·8	2·2	2·2	3·7	5·9	7·1	8·1	10·6	9·8	7·8	6·6	5·1	4·2	5·3	5·7	−0·4	−2·1	1·9	4·6
21	3·7	5·5	6·5	4·0	3·2	4·2	3·4	3·4	2·7	2·4	4·5	7·8	10·9	11·3	11·3	9·8	5·2	13·6	13·5	8·9	5·2	4·5	5·2	5·3	6·5
22	5·2	4·7	4·2	3·3	3·4	4·2	3·7	3·2	2·8	2·9	5·1	6·5	8·8	10·8	11·4	8·2	6·7	7·5	7·8	6·5	6·4	5·1	5·2	5·1	5·8
23	5·1	4·4	4·8	3·6	4·6	2·7	3·8	6·5	11·8	8·7	7·1	8·4	9·3	9·4	10·3	10·4	8·9	8·5	8·3	6·5	6·2	4·7	3·0	2·6	*6·7*
24	1·2	1·9	2·5	3·0	3·0	3·5	3·5	3·3	2·6	3·1	5·9	6·8	8·8	8·9	8·6	7·7	7·4	7·4	12·9	4·6	0·0	2·2	2·2	−6·8	4·6
25	−3·0	3·1	3·9	2·7	1·4	2·1	3·3	2·4	3·4	4·6	4·3	6·6	7·7	8·8	8·2	7·0	6·1	6·4	6·3	6·3	7·2	6·4	5·0	4·9	4·8
26 q	3·5	1·3	3·1	3·2	3·6	3·5	3·5	3·8	3·2	3·0	5·1	6·8	8·4	8·6	8·0	8·0	8·0	7·8	9·0	8·2	8·9	6·0	1·6	−1·4	5·2
27	−0·7	1·3	3·2	5·1	2·8	3·2	3·6	2·2	1·8	2·2	6·1	7·3	8·3	8·7	9·1	8·3	8·2	7·3	7·4	7·3	6·8	6·3	5·6	5·6	5·3
28	4·6	3·8	5·1	5·1	5·3	5·2	4·8	4·4	3·9	2·9	4·4	7·1	8·2	8·6	10·3	10·2	11·4	10·3	8·4	7·5	6·0	5·6	4·2	4·5	6·5
29	4·2	3·2	3·8	2·0	1·3	2·2	3·7	4·5	3·6	2·5	4·5	7·2	9·7	10·5	11·0	10·3	11·1	11·8	13·0	7·0	5·5	0·5	−2·8	0·4	5·5
30	4·0	4·6	4·6	4·2	4·0	3·6	3·7	2·9	2·4	2·6	5·7	6·4	8·4	9·1	9·7	8·9	8·4	9·1	5·3	0·4	3·9	0·1	3·0	2·7	4·9
Mean	1·7	1·6	2·9	3·8	3·7	4·0	4·5	4·5	3·9	4·1	6·3	8·5	9·8	*10·9*	10·3	10·0	8·7	7·6	7·3	6·1	5·4	2·6	*1·3*	1·7	5·5

TERRESTRIAL MAGNETIC FORCE: VERTICAL COMPONENT

Mean values for periods of sixty minutes ending at exact hours, G.M.T.

51 LERWICK (V) — 46,000γ (0·46 C.G.S. unit) + — NOVEMBER 1947

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1	1010	1010	1012	1011	1011	1010	1010	1011	1012	1011	1006	1006	1009	1007	1010	1012	1010	1010	1010	1007	1006	1025	1028	1016	1011
2	1011	1004	1000	978	986	998	1004	1006	1011	1012	1012	1011	1010	1010	1011	1010	1010	1010	1009	1009	1009	1007	1010	1007	1006
3 q	1006	1007	1009	1010	1010	1008	1007	1010	1012	1014	1006	1004	999	994	998	1004	1006	1005	1007	1018	1017	1006	989	956	1004
4	946	972	994	1000	1000	1002	1003	1007	1009	1008	1006	1011	1006	1007	1015	1041	1029	1024	1029	1023	1012	1009	1009	1002	1006
5 q	996	999	1000	996	1000	1006	1008	1009	1012	1011	1010	1010	1010	1006	1005	1004	1000	1000	999	1000	1004	1005	1006	1006	1004
6 q	1006	1004	1004	1004	1000	1000	1000	1002	1005	1005	1004	1004	1000	998	996	995	993	993	993	996	998	1000	1004	1004	1000
7 q	1001	999	998	994	993	993	994	997	999	996	994	993	993	993	993	993	993	997	999	1003	1000	1004	1005	986	996
8 d	980	980	981	981	982	986	987	981	987	997	1001	1011	1020	1023	1029	1082	1077	1070	1083	1076	1038	987	975	958	1011
9 d	957	918	963	971	971	979	980	986	997	1011	1008	1006	1040	1098	1123	1137	1163	1111	1076	1034	995	919	948	1055	1019
10 d	1072	952	899	964	990	1001	1000	1004	1024	1040	1047	1053	1060	1090	1115	1072	1065	1125	1080	1035	973	892	848	876	1011
11 d	820	868	918	956	986	988	990	1005	1010	1011	1011	1024	1042	1056	1186	1162	1093	1166	1129	1075	935	963	976	941	1013
12	963	922	873	921	972	969	985	985	977	1023	1023	1023	1025	1035	1043	1042	1040	1037	1035	1023	1027	1006	985	964	*996*
13	960	970	958	975	982	990	997	1005	1012	1011	1017	1025	1023	1028	1035	1040	1041	1041	1026	1014	1014	1014	1007	987	1007
14	997	1002	999	998	1005	1006	1005	1005	1003	1010	1012	1016	1022	1037	1044	1046	1061	1054	1034	1034	1046	1029	1023	1017	1021
15	1011	995	966	945	970	991	998	1001	1008	1008	1006	1008	1009	1013	1018	1018	1013	1017	1024	1020	1022	1010	999	1000	1003
16	980	975	969	959	968	983	993	993	996	1004	1012	1024	1028	1025	1025	1035	1040	1036	1026	1020	1017	1017	1003	962	1004
17	993	993	992	993	998	1000	1000	1005	1006	1001	1004	1005	1004	1000	1006	1016	1016	1012	1011	1009	1009	1009	1006	1005	1004
18	1004	998	999	988	994	1000	1000	1005	1006	994	994	995	998	1001	1009	1024	1035	1037	1047	1048	1046	1023	1006	1006	1011
19 d	1005	1001	998	999	989	927	945	965	977	1002	1011	1026	1030	1040	1037	1047	1059	1084	1080	1095	1090	1062	994	979	1018
20	980	978	980	993	1004	1008	1011	1011	1016	1014	1018	1025	1020	1012	1011	1017	1018	1027	1029	1021	1018	1013	1005	1004	1010
21	1005	1004	993	987	992	989	993	1002	1010	1011	1006	1006	1005	1008	1016	1018	1035	1041	1077	1076	1088	1059	1030	1022	1020
22	1020	1017	1016	1014	1010	1012	1011	1012	1012	1014	1013	1018	1018	1022	1028	1030	1034	1041	1044	1035	1032	1024	1018	1017	*1021*
23	1015	1011	1010	1006	1001	1003	1004	1011	1005	994	1000	1005	1009	1012	1012	1018	1019	1017	1022	1023	1017	1017	1004	984	1009
24	1000	1012	1011	1009	1008	1008	1006	1008	1010	1008	1008	1010	1011	1010	1011	1011	1006	1005	1008	1044	1045	1059	1041	1023	1015
25	1026	1034	1032	1024	1017	1009	1006	1005	1006	1006	1010	1005	1010	1011	1013	1013	1011	1007	1006	1007	1008	1011	1016	1017	1013
26 q	1017	1014	1013	1011	1010	1010	1006	1006	1005	1005	1001	1004	1007	1012	1011	1011	1007	1005	1005	1011	1013	1017	1022	1015	1010
27	1012	1014	1013	1012	1011	1006	999	998	998	999	999	1003	1005	1005	1006	1006	1004	1003	1000	998	999	1005	1011	1011	1005
28	1011	1008	1007	1005	1000	999	998	997	998	997	995	998	999	1000	1003	1005	1006	1010	1010	1008	1008	1006	1005	1005	1003
29	1004	1005	1005	994	981	982	982	992	994	998	994	993	998	998	1004	1011	1010	1010	1029	1041	1030	1040	1023	1012	1005
30	1005	1005	1006	1006	1006	1005	1005	1004	1001	1002	1000	1002	1001	999	1004	1005	1005	1005	1024	1040	1043	1034	1018	1011	1010
Mean	994	989	*987*	990	995	996	998	1001	1004	1007	1008	1011	1014	1018	1027	1031	1030	*1033*	1032	1028	1019	1009	1001	995	1009

DAILY EXTREMES OF TERRESTRIAL MAGNETIC ELEMENTS, MAGNETIC CHARACTER FIGURES AND TEMPERATURE IN MAGNET HOUSE

52 LERWICK — NOVEMBER 1947

	TERRESTRIAL MAGNETIC ELEMENTS															3-hr. range indices K	Sum of K indices	Magnetic character of day (0-2)	Temperature in magnet house 200 +
	Horizontal force					Declination					Vertical force								
	Maximum 14,000γ +		Minimum 14,000γ +		Range	Maximum 11° +		Minimum 11° +		Range	Maximum 46,000γ +		Minimum 46,000γ +		Range				
	h. m.	γ	γ	h. m.	γ	h. m.	′	′	h. m.	′	h. m.	γ	γ	h. m.	γ				°A.
1	00 26	401	336	12 00	65	11 32	15·5	-5·1	22 00	20·6	21 58	1043	1001	10 27	42	2,1,2,3,2,1,1,3	15	1	85·2
2	04 01	391	327	11 25	64	02 58	11·8	-4·1	03 58	15·8	00 01	1015	974	03 47	41	2,3,2,1,1,1,1,1	12	0	85·8
3 q	23 21	387	336	11 09	51	15 11	11·7	-0·3	23 32	12·0	20 18	1021	946	23 59	75	0,1,1,1,1,1,2,3	10	0	86·0
4	23 13	381	331	11 23	50	14 09	15·8	-5·0	00 56	20·8	15 26	1052	940	00 11	112	3,1,1,2,2,3,2,1	15	1	83·8
5 q	23 50	387	348	10 52	39	12 16	12·4	2·5	08 23	9 9	09 06	1014	993	00 28	21	1,1,1,1,1,0,1,1	7	0	84·5
6 q	19 29	385	349	11 24	36	14 01	9·1	3·2	08 41	*5·9*	00 04	1009	993	17 52	*16*	0,0,0,0,1,1,0,0	2	0	82·2
7 q	22 54	391	360	23 07	*31*	14 21	10·8	-5·0	23 32	15·8	22 42	1010	976	23 59	34	0,0,1,1,1,1,1,3	8	0	81·0
8 d	18 42	401	313	21 41	88	15 18	20·8	-12·9	21 36	33·7	15 41	1108	954	23 56	154	2,2,2,2,3,3,4,3	21	1	80·8
9 d	14 07	552	*-324*	22 58	876	20 45	31·7	*-58·1*	21 40	*89·8*	23 00	*1344*	792	22 15	*552*	4,2,2,3,5,4,6,7	33	2	81·0
10 d	20 42	432	-249	01 03	681	20 56	*38·3*	-46·6	01 31	84·9	17 48	1143	747	01 52	396	7,4,3,3,4,4,6,6	37	2	81·2
11 d	16 38	*818*	-165	00 55	*983*	13 53	26·7	-29·1	00 01	55·8	14 11	1226	*725*	00 53	501	7,3,3,3,7,6,6,4	39	2	80·7
12	21 16	378	226	01 19	152	12 53	12·2	-12·2	03 06	24·4	17 48	1047	849	02 55	198	4,4,3,2,2,3,2,4	24	1	80·0
13	18 49	394	293	02 02	101	13 31	11·0	-6·2	18 09	17·2	18 03	1047	949	00 08	98	3,2,2,3,2,3,3,2	20	1	82·2
14	17 09	383	327	10 11	56	13 58	15·5	-2·1	22 24	17·6	17 00	1074	995	00 01	79	2,1,1,2,2,3,3,2	16	1	82·1
15	02 41	380	326	10 03	54	13 10	13·2	-11·9	23 35	25·1	18 38	1030	927	03 05	103	4,3,2,1,2,2,2,3	19	1	80·5
16	22 46	392	317	10 15	75	14 20	14·1	-5·9	23 50	20·0	16 06	1046	939	23 09	107	3,3,2,2,2,1,1,4	18	1	80·7
17	05 50	381	331	11 10	50	13 51	11·7	-2·9	00 01	14·6	16 00	1018	985	00 01	33	2,2,2,1,2,1,1,0	11	0	82·7
18	23 53	387	346	08 39	41	17 33	15·5	-3·6	23 03	19·1	19 22	1060	984	03 23	76	2,2,2,1,1,2,2,3	15	1	80·0
19 d	16 38	388	314	08 53	74	12 35	16·6	-6·9	22 48	23·5	19 33	1110	909	05 55	201	2,4,3,3,2,3,2,4	23	1	79·7
20	21 50	381	317	11 01	64	12 56	11·1	-8·6	21 46	19·7	17 51	1037	969	00 53	68	2,2,1,2,1,2,2,3	15	1	79·7
21	20 28	389	335	12 15	54	17 49	18·3	0·3	09 35	18·0	20 10	1091	985	03 24	106	1,1,2,2,1,3,3,3	16	1	80·5
22	17 27	368	336	12 28	32	14 28	12·8	1·4	09 56	11·4	18 30	1047	1008	04 32	39	1,1,0,2,2,2,1,1	10	0	81·7
23	22 49	405	323	08 09	82	08 54	14·5	-0·5	23 33	15·0	19 20	1025	980	23 16	45	1,1,3,2,1,2,1,3	14	1	83·0
24	19 35	652	340	23 04	312	19 28	20·0	-18·9	19 57	38·9	19 33	1130	987	00 01	143	2,0,1,1,0,2,6,4	16	1	82·8
25	20 12	387	334	10 11	53	13 27	9·4	-6·6	00 08	16·0	01 24	1037	1001	07 38	36	3,2,2,2,1,1,1,1	13	0	81·0
26 q	17 59	387	346	10 55	41	20 07	11·1	-2·9	23 15	14·0	22 13	1027	999	10 43	28	1,1,1,1,1,1,1,3	10	0	81·9
27	18 42	400	346	11 30	54	14 21	9·8	-2·0	00 26	11·8	01 26	1017	996	18 45	21	2,1,2,1,1,1,2,1	11	0	81·5
28	20 43	388	354	11 38	34	17 07	12·1	1·9	10 00	10·2	00 08	1013	992	10 31	21	1,1,1,1,1,1,1,1	8	0	81·0
29	06 17	401	351	12 32	50	17 58	16·0	-4·4	22 58	20·4	21 02	1053	977	06 22	76	1,2,2,1,2,2,3,3	16	1	81·3
30	17 38	386	345	21 22	41	18 04	11·5	-7·7	19 07	19·2	20 42	1056	998	13 37	58	1,1,1,2,1,1,3,3	13	1	81·2
Mean	- -	418	272	- -	146	- -	15·4	-8·7	- -	24·0	- -	1065	949	- -	116	-	-	0·73	81·9

q denotes an international quiet day and d an international disturbed day.

TERRESTRIAL MAGNETIC FORCE: HORIZONTAL COMPONENT

Mean values for periods of sixty minutes ending at exact hours, G.M.T.

53 LERWICK (H) — 14,000γ (0·14 C.G.S. unit) + — DECEMBER 1947

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1	362	358	367	371	372	374	374	373	371	336	341	361	357	357	361	367	374	376	378	379	376	376	374	372	367
2	369	368	371	373	371	371	371	370	371	367	363	354	355	359	366	370	373	366	366	376	375	374	367	361	368
3 q	370	370	366	367	369	370	374	369	374	369	365	360	358	363	368	372	374	375	378	378	375	374	375	371	370
4	371	373	373	371	373	374	384	393	390	385	374	371	368	360	369	379	362	361	368	373	374	367	365	369	373
5	367	367	374	347	388	385	389	383	374	367	356	355	362	366	360	363	371	369	366	371	371	375	370	331	368
6 d	320	288	335	333	367	371	373	374	369	345	341	353	348	339	342	353	357	378	385	376	353	361	359	356	*353*
7	356	358	358	358	362	365	367	366	345	346	344	341	344	344	345	350	377	363	360	353	356	365	365	363	357
8	362	363	363	365	372	366	366	371	366	358	356	348	347	353	358	362	365	363	366	367	367	370	371	372	363
9 d	371	373	373	384	384	378	371	380	374	365	346	335	351	350	326	357	365	354	380	391	342	350	355	351	363
10	342	354	353	361	373	375	363	361	351	338	332	347	352	354	356	363	360	370	374	373	370	373	357	358	359
11	358	360	362	362	360	371	374	373	370	362	342	336	339	343	345	357	362	363	356	367	364	363	367	368	359
12 d	360	351	349	349	361	374	380	367	360	357	354	351	322	351	358	370	387	387	386	370	371	361	345	357	362
13 d	360	359	346	356	370	374	363	357	360	338	337	339	346	342	362	367	358	357	367	364	354	359	363	365	357
14	364	363	360	357	366	379	370	353	342	334	334	327	343	358	349	355	360	360	360	358	353	360	364	359	355
15	332	361	371	372	374	372	374	366	362	353	353	351	353	352	345	350	352	361	360	360	356	356	364	366	359
16	369	369	366	367	379	374	378	378	370	358	349	346	348	353	362	367	369	372	374	372	373	373	373	372	367
17 q	374	374	375	374	374	376	380	375	368	363	360	362	366	363	362	365	363	367	370	371	373	374	371	372	370
18	373	383	373	376	380	380	377	372	370	367	363	363	361	358	364	368	371	372	375	368	356	363	367	369	370
19	365	374	374	371	370	384	379	372	367	358	354	355	355	354	356	360	355	362	367	362	359	365	371	372	365
20 q	372	371	371	372	372	373	373	370	370	365	362	362	363	363	361	357	359	364	366	370	373	367	371	375	368
21 q	375	375	373	375	376	377	378	378	374	369	363	361	358	361	365	370	375	379	381	383	383	381	380	378	374
22	377	377	378	380	383	384	384	384	378	372	370	369	371	370	369	365	363	372	376	369	370	374	371	354	373
23 d	337	337	339	367	368	366	357	366	372	375	375	371	376	374	396	381	380	383	383	383	378	379	370	368	370
24	370	368	370	372	375	377	378	376	373	368	366	363	362	365	368	372	378	378	371	372	370	393	372	367	372
25	367	368	370	378	379	380	379	379	375	373	368	366	366	368	379	379	383	389	385	382	383	384	372	372	*376*
26	367	371	378	379	383	389	387	379	374	371	375	370	367	373	373	365	378	377	376	378	380	377	377	370	376
27	368	366	364	368	367	376	384	384	376	371	362	362	361	366	369	371	374	384	377	369	370	373	376	348	370
28	357	364	366	366	368	369	373	376	370	363	363	361	356	363	372	375	377	377	377	377	376	378	378	361	369
29	364	365	366	367	367	370	374	373	371	369	366	366	366	370	369	353	375	371	375	374	379	407	377	365	371
30	367	369	365	367	369	374	372	371	369	365	361	362	362	367	373	375	374	375	376	377	380	376	372	372	370
31 q	372	372	373	375	380	378	378	378	376	375	369	367	370	371	372	374	376	378	378	374	376	376	375	376	375
Mean	363	364	365	367	373	*375*	375	373	369	361	357	*356*	357	359	362	366	369	371	373	372	369	372	369	365	367

376 at 0-1h. January 1, 1948

MAGNETIC DECLINATION (WEST)

Mean values for periods of sixty minutes ending at exact hours, G.M.T.

54 LERWICK (D) — 11° + — DECEMBER 1947

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′
1	3·8	2·6	2·4	4·2	3·9	3·6	3·5	3·5	2·2	2·2	5·7	5·1	7·5	7·5	8·3	8·3	5·8	6·8	6·6	5·8	4·5	4·4	4·1	3·9	4·9
2	3·9	3·8	3·7	4·7	4·7	4·3	4·2	4·2	4·4	4·4	6·5	7·4	12·3	11·3	11·2	11·6	7·8	11·1	7·5	5·3	4·7	1·6	1·0	1·2	5·9
3 q	2·8	3·7	3·5	3·7	3·7	2·5	2·5	4·5	4·2	4·2	5·1	6·5	7·5	8·4	8·1	7·0	6·2	6·0	5·6	5·1	4·8	4·2	3·2	4·2	4·9
4	4·2	4·2	3·1	3·8	3·8	4·8	4·9	4·8	4·3	3·7	4·5	6·6	8·3	7·3	8·2	8·1	8·9	9·1	6·6	6·2	3·0	-1·9	-0·2	2·6	4·9
5	4·8	-1·1	1·7	5·4	2·2	2·2	5·0	5·0	4·2	6·6	8·3	8·0	9·5	10·3	10·4	8·8	8·4	7·0	2·2	5·1	2·7	3·6	1·1	-7·4	4·7
6 d	-5·9	-24·4	-17·7	-5·9	4·8	4·4	4·2	4·3	4·0	8·4	11·5	13·9	15·4	12·7	13·6	17·2	12·7	9·1	6·0	-1·6	1·3	-12·0	-18·6	-7·0	*2·1*
7	2·2	5·1	5·7	6·5	5·5	5·7	6·3	6·2	4·6	4·2	5·1	5·8	7·8	7·5	7·7	10·2	2·7	10·8	13·0	2·2	6·1	4·8	4·3	4·2	6·0
8	4·0	3·9	4·9	5·0	4·6	4·3	13·6	8·4	3·2	2·5	4·6	6·4	6·7	9·3	7·4	6·0	5·5	6·2	5·3	5·5	3·8	3·2	2·7	2·6	5·4
9 d	4·2	4·5	3·9	5·1	0·1	4·0	8·5	7·5	7·0	5·6	6·0	10·6	10·3	13·1	7·3	5·7	7·4	2·2	5·6	7·0	-1·1	-4·4	-2·5	-3·6	4·9
10	0·3	3·2	7·3	3·8	2·2	3·7	4·5	6·4	6·0	4·6	5·0	9·4	10·7	10·2	8·7	8·0	5·3	5·2	5·1	5·0	3·2	0·1	-6·6	-3·6	4·5
11	-1·8	2·2	3·6	5·0	2·7	0·8	7·1	5·6	2·9	4·2	4·9	8·5	10·1	11·1	8·4	7·7	7·5	8·9	7·7	6·5	-5·9	2·5	2·9	-2·8	4·5
12 d	-3·1	2·6	6·3	2·0	7·0	4·6	6·0	6·4	6·2	6·0	5·5	7·6	12·2	13·2	13·2	10·3	9·3	9·0	8·9	3·1	2·7	0·8	-2·5	-3·8	5·6
13 d	1·0	2·3	7·2	8·0	4·2	5·5	6·5	7·6	9·5	7·5	6·2	7·5	9·3	9·6	10·1	8·9	4·9	3·2	4·6	3·7	-2·7	-3·9	2·1	2·7	5·2
14	3·7	5·1	5·3	6·9	3·7	5·1	6·3	8·0	7·2	6·4	6·9	9·8	11·8	9·2	6·1	6·6	6·1	4·3	5·4	4·2	0·3	2·0	0·8	-0·2	5·5
15	-0·2	-0·4	2·9	3·5	3·9	6·0	6·7	5·8	3·9	4·0	5·1	4·8	7·6	8·3	7·6	8·4	9·2	6·8	2·4	3·8	0·4	-0·6	3·5	0·4	4·3
16	2·8	3·2	3·7	4·2	4·4	3·9	4·2	5·7	4·7	3·7	4·1	5·1	6·5	8·0	7·4	6·4	5·9	5·5	5·4	5·1	4·5	4·0	3·5	3·7	4·8
17 q	3·0	4·2	3·6	3·7	4·1	5·6	3·7	4·2	3·9	4·2	5·1	6·7	8·9	10·3	10·7	9·4	7·5	6·5	6·2	5·1	4·8	3·8	2·8	0·8	5·4
18	1·2	-0·1	3·4	3·2	3·7	4·9	5·1	5·1	4·6	6·0	7·6	9·4	9·7	8·6	8·0	6·8	5·8	6·0	6·0	5·4	2·1	4·0	2·2	-3·9	4·8
19	-1·4	2·2	4·2	5·8	6·2	7·5	6·4	5·3	5·9	4·8	4·7	8·5	9·8	11·3	11·3	11·7	10·4	8·9	7·1	6·1	5·0	4·0	4·0	4·1	*6·4*
20 q	3·7	3·8	4·2	3·6	4·2	5·1	5·1	5·1	4·2	4·5	5·7	8·0	9·5	12·2	12·2	10·8	9·5	8·0	7·6	6·0	4·1	2·8	3·1	2·8	6·1
21 q	3·7	3·6	3·7	4·2	4·4	4·3	4·2	4·2	3·8	4·6	5·6	5·8	6·5	7·6	7·6	6·6	6·4	6·0	5·9	5·7	4·8	4·7	4·6	4·6	5·1
22	4·8	5·1	5·0	4·8	4·7	4·6	4·0	4·0	3·9	4·2	5·1	6·7	8·9	11·2	12·1	11·8	11·8	8·0	9·4	8·4	5·0	4·4	3·5	-2·3	6·0
23 d	-2·6	-4·6	0·1	2·5	3·1	3·2	3·3	3·4	2·1	2·8	4·9	4·8	9·2	11·2	15·6	13·3	13·2	9·0	7·2	6·1	4·9	3·4	1·3	0·4	4·9
24	2·6	3·5	3·3	2·7	3·4	3·2	3·2	3·2	3·2	3·7	5·2	5·4	5·6	7·1	7·6	7·1	7·5	7·4	5·2	6·4	5·9	-1·2	1·6	0·3	4·3
25	2·7	3·5	4·2	4·8	3·7	3·5	3·3	3·6	3·3	3·8	4·3	5·6	7·5	9·8	8·8	7·3	7·8	8·9	8·7	9·8	6·0	6·0	5·2	3·8	5·7
26	3·2	2·9	0·4	3·5	3·9	3·3	5·7	4·6	4·6	5·1	7·9	6·5	7·5	10·3	11·3	8·4	8·4	9·7	5·1	3·2	6·0	5·1	4·0	1·8	5·5
27	-5·2	-1·4	-1·1	3·7	0·4	2·7	5·3	2·4	3·2	3·8	7·5	6·0	8·3	8·9	8·5	7·3	6·5	9·2	9·5	6·8	7·0	3·2	2·7	-4·4	4·2
28	-2·7	3·1	5·5	4·7	3·6	3·6	4·4	4·2	3·5	4·2	4·6	6·9	7·5	8·1	9·2	8·0	6·8	6·2	5·1	4·2	3·7	3·7	-3·6	-0·4	4·3
29	0·7	1·4	2·1	1·6	4·1	4·2	3·7	3·7	4·2	5·7	8·0	8·3	8·0	9·4	13·4	10·4	10·5	8·4	5·1	4·0	0·8	-4·7	1·1	0·4	4·8
30	3·7	4·0	4·8	4·8	4·9	3·9	4·5	4·3	4·4	4·8	5·1	7·1	7·7	9·1	8·4	8·0	6·9	6·6	6·5	4·7	4·1	4·6	4·3	2·8	5·4
31 q	3·2	3·8	4·6	4·6	4·6	4·7	4·6	4·6	4·7	5·4	6·0	6·5	7·5	7·5	8·0	7·5	6·5	6·1	6·2	5·6	5·0	5·1	4·2	4·0	5·4
Mean	1·5	1·8	3·1	4·0	3·9	4·2	5·2	5·0	4·5	4·7	5·9	7·3	8·9	9·7	9·6	8·8	7·7	7·3	6·4	5·1	3·3	1·9	1·3	*0·4*	5·1

3·3 at 0-1h. January 1, 1948

TERRESTRIAL MAGNETIC FORCE: VERTICAL COMPONENT

Mean values for periods of sixty minutes ending at exact hours, G.M.T.

55 LERWICK (V) — 46,000γ (0·46 C.G.S. unit) + — DECEMBER 1947

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1	996	957	979	998	1004	1004	1004	1001	1000	1005	999	997	998	999	1000	1003	1004	1004	1005	1005	1005	1005	1002	1002	999
2	1002	1002	1003	1002	1003	1003	1002	1001	999	1000	999	1002	996	994	1003	1013	1041	1047	1034	1017	1012	1016	1016	1010	1009
3 q	1004	1001	1003	1000	1000	1000	999	999	997	1001	999	997	997	997	999	1000	1001	1003	1005	1005	1005	1005	1004	1004	1001
4	1001	1000	1000	1000	999	999	997	993	994	993	997	993	993	997	997	1003	1026	1031	1025	1017	1011	1008	1006	999	1003
5	989	957	954	956	918	955	972	983	993	994	999	1000	999	999	1002	1008	1005	1014	1023	1014	1017	1011	999	989	*990*
6 d	912	873	879	903	951	973	993	999	1004	1007	1011	1017	1023	1047	1065	1065	1083	1110	1118	1101	1047	1011	973	973	1006
7	992	997	993	995	999	1001	1001	1005	1014	1011	1010	1011	1011	1014	1017	1017	1034	1041	1065	1069	1052	1028	1017	1016	1017
8	1011	1003	1000	1002	1004	998	981	983	1000	1009	1011	1012	1013	1011	1012	1015	1014	1017	1014	1014	1014	1014	1011	1005	1007
9 d	1005	1002	999	975	980	985	982	980	988	997	1007	1011	1017	1034	1047	1029	1030	1058	1087	1095	974	991	1009	999	1012
10	991	993	972	970	989	993	998	1003	1005	1011	1016	1014	1017	1020	1023	1024	1025	1020	1011	1011	1016	1011	1012	1011	1007
11	1011	1005	993	991	981	968	976	992	1000	1004	1008	1013	1018	1027	1041	1041	1034	1041	1066	1083	1058	1023	1012	994	1016
12 d	992	997	982	967	969	985	989	998	1000	1001	1006	1010	1023	1022	1038	1046	1095	1119	1091	1076	1064	1038	1017	1006	*1022*
13 d	1005	1004	983	944	960	983	995	1002	998	1001	1005	1018	1025	1040	1050	1050	1054	1057	1028	1022	1016	1016	1006	999	1011
14	997	992	993	986	975	981	989	993	1006	1017	1023	1032	1040	1038	1053	1058	1053	1043	1030	1029	1027	1017	1003	993	1015
15	978	936	974	981	981	983	987	998	1005	1005	1005	1010	1012	1016	1029	1041	1041	1040	1037	1029	1027	1012	1000	994	1005
16	1003	1006	1005	1002	988	991	995	1000	1000	1001	1009	1009	1006	1011	1016	1014	1014	1014	1010	1009	1011	1008	1005	1005	1005
17 q	1007	1003	1002	1005	1004	1002	1001	1004	1004	1006	1006	1003	1001	1003	1006	1011	1018	1017	1013	1014	1014	1011	1005	1003	1006
18	994	987	994	1001	1000	999	1000	1003	1004	999	1001	1004	1004	1006	1010	1010	1008	1009	1010	1013	1025	1016	1005	984	1004
19	986	988	992	993	997	985	945	999	1004	1005	1005	1008	1014	1010	1017	1023	1029	1028	1029	1035	1035	1025	1019	1011	1008
20 q	1008	1008	1006	1003	1004	1005	1002	1002	1004	1005	1002	1003	1005	1004	1009	1022	1025	1024	1024	1024	1022	1021	1016	1011	1011
21 q	1006	1005	1005	1004	1001	1004	1004	1003	1004	1005	1005	1000	995	997	1000	1000	998	999	1000	1003	1003	1003	1005	1006	1002
22	1004	1001	1001	1000	997	998	1000	1000	1000	1004	1000	998	999	1000	1003	1012	1023	1024	1026	1050	1046	1025	1016	1003	1010
23 d	992	981	987	987	993	997	1000	999	1001	1000	999	999	994	992	994	1009	1025	1023	1018	1016	1018	1014	1010	1017	1003
24	1017	1014	1009	1004	1003	1004	1003	1004	1005	1004	1004	1005	1005	1001	1005	1005	1005	1006	1012	1011	1016	1011	992	1014	1007
25	1012	1012	1010	1004	999	999	998	998	998	998	999	1004	1001	1000	1004	1003	1000	1000	1007	1008	1011	1011	1022	1022	1005
26	1018	1009	1000	1005	1001	998	997	998	999	998	999	1004	1004	1005	1012	1014	1012	1016	1022	1016	1008	1007	1007	1007	1007
27	1009	1008	1004	1006	1005	992	980	985	992	993	995	998	998	999	1005	1007	1005	1004	1010	1022	1020	1017	1011	1012	1003
28	1015	1012	1011	1011	1007	1004	1000	1000	1000	1000	999	1000	1004	1005	1005	1010	1010	1008	1006	1004	1004	1000	1005	994	1005
29	1004	1005	1007	1006	1005	1004	1000	999	997	993	993	994	1000	1006	1023	1059	1041	1036	1021	1013	1010	986	973	993	1007
30	999	1000	1004	1005	1004	1003	1001	1000	999	999	999	997	995	994	998	1000	1004	1004	1005	1005	1004	1000	1000	998	1001
31 q	994	993	994	994	993	994	998	998	995	993	993	992	988	988	989	994	1000	1000	1001	1005	1001	999	997	993	995
Mean	999	992	992	*990*	991	993	993	997	1000	1002	1003	1005	1006	1009	1015	1019	1024	*1028*	1027	1027	1019	1012	1006	1002	1006

997 at 0-1h. January 1, 1948.

DAILY EXTREMES OF TERRESTRIAL MAGNETIC ELEMENTS, MAGNETIC CHARACTER FIGURES AND TEMPERATURE IN MAGNET HOUSE

56 LERWICK — December 1947

	TERRESTRIAL MAGNETIC ELEMENTS												3-hr. range indices K	Sum of K indices	Magnetic character of day (0-2)	Temperature in magnet house 200 +
	Horizontal force					Declination			Vertical force							
	Maximum 14,000γ +		Minimum 14,000γ +		Range	Maximum 11° +	Minimum 11° +	Range	Maximum 46,000γ +		Minimum 46,000γ +		Range					
	h. m.	γ	γ	h. m.	γ	h. m.	′	′	h. m.	′	h. m.	γ	γ	h. m.	γ				°A.
1	08 54	384	317	09 34	67	10 13	10·4	-2·4	08 57	12·8	09 41	1013	949	01 36	64	2,1,2,3,1,1,1,1	12	1	81·0
2	16 44	394	347	12 09	47	17 39	16·0	-1·5	21 50	17·5	16 40	1065	992	12 43	73	1,0,0,1,2,3,2,2	11	1	80·1
3 q	19 40	378	356	12 05	22	13 30	9·4	1·1	05 57	8·3	00 01	1007	994	08 15	*13*	1,1,1,1,0,0,0,1	5	0	80·0
4	07 37	396	348	16 59	48	16 43	16·2	-6·1	21 12	22·3	17 03	1040	991	12 15	49	1,0,2,1,2,3,3,3	15	1	80·3
5	04 26	396	321	22 29	75	01 32	14·6	-10·9	23 29	25·5	18 08	1025	903	04 24	122	3,3,2,1,2,2,2,3	18	1	80·1
6 d	18 28	414	*255*	01 21	*159*	15 55	*19·3*	*-32·0*	01 19	*51·3*	18 05	1138	*849*	02 06	*289*	4,3,2,2,3,4,4,4	26	1	80·1
7	16 45	407	337	08 45	70	17 46	17·5	-14·8	16 46	32·3	18 47	1081	985	00 01	96	2,1,2,1,1,4,4,2	17	1	81·1
8	05 18	380	342	12 33	38	06 18	16·9	1·2	23 16	15·7	17 29	1017	965	06 36	52	1,3,3,2,1,1,1,1	13	1	82·0
9 d	19 37	436	287	20 23	149	20 17	*19·3*	-16·8	20 34	36·1	19 32	1143	939	20 53	204	1,3,2,2,3,3,5,3	22	1	82·1
10	21 17	397	326	10 44	71	13 04	11·9	-8·9	22 33	20·8	15 53	1029	956	02 53	73	3,3,2,2,1,2,2,3	18	1	81·8
11	23 11	385	329	11 27	56	19 32	12·7	-9·4	20 18	22·1	19 52	1113	956	05 52	157	2,3,3,2,2,2,4,3	21	1	82·4
12 d	16 54	423	313	12 41	110	13 52	17·1	-7·7	00 16	24·8	16 53	*1182*	952	03 17	230	3,3,2,1,3,5,3,3	23	1	83·4
13 d	05 25	378	329	09 16	49	02 42	16·7	-6·3	20 48	23·0	17 06	1066	923	03 07	143	4,3,2,2,2,3,3,2	21	1	81·8
14	05 30	386	321	11 31	65	12 16	13·1	-3·5	23 38	16·6	15 23	1061	971	04 12	90	1,2,2,2,3,2,2,2	16	1	82·1
15	22 55	378	304	00 45	74	16 31	10·9	-9·8	00 18	20·7	16 46	1044	915	01 14	129	4,1,2,1,2,2,3,3	18	1	82·3
16	04 40	385	342	11 13	43	13 47	8·0	1·4	00 01	6·6	14 50	1015	979	04 39	36	1,2,1,2,1,0,0,0	7	0	81·4
17 q	06 42	381	357	10 11	24	14 02	11·6	-3·8	23 59	15·4	16 45	1020	996	23 59	24	1,1,1,1,1,1,1,2	9	0	82·1
18	00 56	390	353	20 15	37	12 06	10·6	-8·8	23 47	19·4	20 43	1026	974	23 28	52	2,1,1,0,1,0,2,3	10	0	82·0
19	05 37	390	350	13 07	40	13 48	12·7	-6·5	00 01	19·2	20 20	1040	980	05 34	60	3,2,2,1,1,1,2,2	14	1	82·3
20 q	20 22	376	354	17 03	22	13 42	13·5	2·1	21 16	11·4	17 05	1028	1000	10 56	28	0,1,0,0,1,1,1,1	5	0	82·2
21 q	20 43	384	357	12 27	27	14 08	7·9	3·0	00 01	*4·9*	00 12	1008	993	12 53	15	0,0,0,1,0,0,0,0	1	0	82·2
22	19 07	391	342	23 27	49	19 24	13·9	-12·3	23 26	26·2	19 40	1075	995	04 47	80	0,0,1,0,2,2,3,3	11	1	82·1
23 d	14 21	407	324	01 18	83	14 07	*19·3*	-8·3	01 23	27·6	16 18	1031	965	01 07	66	3,1,2,2,3,2,2,2	17	1	82·4
24	21 48	*445*	357	22 35	88	16 43	8·2	-16·4	21 45	24·6	21 37	1030	968	22 09	62	0,1,0,1,1,1,1,4	9	1	81·7
25	17 41	392	362	00 21	30	19 34	12·5	1·3	00 46	11·2	22 43	1027	995	09 54	32	1,1,0,1,1,1,2,2	9	0	82·1
26	05 58	398	360	15 10	38	14 28	12·1	-6·6	23 59	18·7	18 49	1024	990	01 55	34	2,2,2,2,2,2,2,3	17	1	82·5
27	22 40	400	335	23 17	65	17 54	11·4	-10·5	23 40	21·9	22 31	1024	970	05 59	54	2,2,2,2,1,2,2,3	16	1	82·0
28	22 58	401	327	23 23	74	14 08	10·6	-15·8	22 49	26·4	22 37	1018	976	23 13	42	3,1,1,1,2,1,1,4	14	1	81·5
29	21 47	423	335	15 18	88	15 00	18·0	-10·6	21 10	28·6	15 24	1074	964	22 02	110	1,2,1,1,3,3,3,3	17	1	81·0
30	14 45	383	360	12 15	23	13 29	9·8	1·6	00 01	8·2	19 22	1008	993	13 10	15	1,1,0,0,1,1,1,1	6	0	81·0
31 q	07 00	381	364	11 16	*17*	12 40	8·3	2·8	00 35	5·5	19 34	1009	988	13 45	21	1,1,0,0,0,0,1,0	3	0	80·3
Mean	- -	395	336	- -	60	- -	13·2	-6·9	- -	20·2	- -	1047	967	- -	81	-	-	0·71	81·6

q denotes an international quiet day and d an international disturbed day.

DIURNAL INEQUALITIES OF THE TERRESTRIAL MAGNETIC ELEMENTS

ALL DAYS

Departures from the mean of the 24 hourly values (uncorrected for non-cyclic change)

57 LERWICK

HORIZONTAL FORCE

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
Jan.	-3·2	-1·7	-1·9	-1·7	-3·1	-0·3	+2·5	+0·3	-2·9	-10·2	*-15·9*	-15·2	-10·2	-2·6	+1·8	+8·2	+8·9	+15·7	*+15·8*	+6·0	+4·2	+3·6	+2·2	-0·3
Feb.	-5·9	+0·1	-7·6	-5·1	+4·7	+9·8	+12·4	+10·2	+2·1	-13·3	-21·0	*-27·2*	-24·8	-13·9	+1·8	+7·4	+15·9	*+16·0*	+15·9	+11·1	+11·2	+1·7	+4·4	-5·9
Mar.	*-49·6*	-44·9	-35·1	-31·7	-12·1	+1·8	+3·9	-3·0	-10·9	-21·7	-18·3	-13·8	-5·9	+11·8	+35·5	+56·0	*+71·5*	+55·7	+48·9	+30·2	+10·4	-9·8	-27·5	-41·4
Apr.	-4·3	+1·4	-2·3	-0·1	+1·6	+1·8	+2·2	-5·1	-14·7	-32·2	-42·8	*-43·4*	-32·4	-15·5	-3·0	+21·9	+32·5	+36·4	*+45·0*	+36·5	+13·8	+12·4	-5·3	-4·4
May	+1·9	-7·0	-14·2	-14·5	-5·8	-2·2	-9·0	-17·7	-32·9	-41·5	*-46·7*	-41·9	-29·3	-13·2	+6·2	+23·1	+34·7	*+48·4*	+47·4	+43·9	+35·3	+20·5	+9·4	+5·1
June	-32·2	-18·5	-15·9	-24·7	-14·8	-9·9	-15·6	-24·7	-34·4	-39·8	*-41·2*	-39·1	-19·1	-2·1	+11·0	+26·5	+37·8	*+60·7*	+59·2	+50·7	+42·5	+31·4	+13·9	-1·7
July	-14·0	-24·1	-15·3	-13·4	-5·3	-1·4	-11·7	-22·1	-31·8	-43·6	*-49·3*	-48·7	-36·6	-11·6	+8·2	+30·7	+46·9	+53·5	*+61·4*	+52·1	+44·2	+23·9	+12·8	-4·8
Aug.	-28·2	-43·7	-23·5	-12·8	-8·0	-11·3	-12·2	-18·1	-28·9	*-48·2*	-48·0	-40·4	-20·9	+2·1	+30·5	+55·4	*+66·5*	+61·2	+53·2	+45·2	+35·7	+15·2	-5·6	-15·2
Sept.	-43·0	-48·7	-36·5	-14·6	-5·7	-4·7	-9·6	-13·2	-23·3	-31·9	-33·4	-26·8	-7·0	+12·5	+38·2	+66·4	+94·0	*+94·6*	+64·7	+40·7	+8·1	-31·8	-38·3	*-50·7*
Oct.	-31·2	*-33·1*	-19·0	-4·6	-3·3	+4·6	+3·5	+2·3	-7·6	-21·0	-28·5	-26·6	-13·7	+1·7	+17·3	+40·8	*+50·6*	+50·3	+42·1	+24·2	+8·0	-4·5	-22·0	-30·3
Nov.	-19·1	*-19·6*	-1·2	+5·6	+8·6	+8·1	+7·2	+3·5	-2·4	-8·7	-13·9	-13·6	-11·9	-0·9	+10·2	+10·9	*+18·5*	+16·9	+14·0	+14·5	+5·2	-6·2	-14·0	-11·7
Dec.	-4·1	-3·2	-1·5	+0·5	+5·9	+8·3	*+8·4*	+6·4	+2·1	-5·2	-9·8	*-10·7*	-10·1	-7·7	-4·8	-0·7	+2·6	+4·4	+6·2	+5·5	+2·2	+5·1	+2·1	-1·9
Year	-19·4	-20·3	-14·5	-9·8	-3·1	+0·4	-1·5	-6·8	-15·6	-26·4	*-30·7*	-28·8	-18·5	-3·3	+12·7	+28·9	+40·0	*+42·8*	+39·5	+30·1	+18·4	+5·1	-5·7	-13·6
Winter	-8·1	-6·1	-3·1	-0·2	+4·0	+6·5	+7·6	+5·1	-0·3	-9·3	-15·1	*-16·9*	-14·3	-6·3	+2·3	+6·5	+11·5	*+13·3*	+13·0	+9·3	+5·7	+1·1	-1·3	-4·9
Equinox	*-32·0*	-31·3	-23·2	-12·7	-4·9	+0·9	0·0	-4·7	-14·1	-26·7	-30·7	-27·7	-14·7	+2·6	+22·0	+46·3	*+62·1*	+59·3	+50·2	+32·9	+10·1	-8·4	-23·3	-31·7
Summer	-18·1	-23·3	-17·2	-16·3	-8·5	-6·2	-12·1	-20·7	-32·0	-43·3	*-46·3*	-42·5	-26·5	-6·2	+14·0	+33·9	+46·5	*+55·9*	+55·3	+48·0	+39·4	+22·7	+7·6	-4·1

DECLINATION

	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′
Jan.	-2·00	-2·34	-1·71	-1·08	-1·40	-0·94	-0·93	-1·17	-1·41	-0·84	+0·03	+1·56	+3·01	*+3·95*	+3·52	+3·52	+2·47	+2·99	+1·62	0·00	-1·37	-1·66	*-2·92*	-2·90
Feb.	-2·65	-3·43	*-4·13*	-2·54	-1·82	-1·74	-1·58	-2·04	-3·12	-2·69	-0·68	+2·22	+4·83	+6·13	*+6·29*	+5·08	+3·78	+2·69	+2·36	+1·52	-0·30	-1·88	-3·27	-3·03
Mar.	-3·79	-5·40	*-6·88*	-5·39	-3·23	-1·76	-1·10	-2·55	-4·93	-2·65	-0·52	+3·95	+7·45	*+8·17*	+7·88	+6·71	+5·23	+4·17	+2·73	+2·34	-0·18	-1·73	-2·39	-6·13
Apr.	-2·21	-2·98	-2·83	-3·05	-3·39	-3·50	-4·82	-6·10	*-6·79*	-4·65	-0·82	+2·82	+7·21	*+8·64*	+8·25	+6·19	+4·03	+2·67	+1·69	+2·22	+1·48	+0·12	-1·73	-2·45
May	-1·09	-2·03	-2·03	-4·15	-6·33	-7·17	-8·04	*-8·48*	-7·33	-2·41	+1·03	+5·27	+8·16	*+8·69*	+7·41	+4·89	+3·16	+1·97	+1·46	+1·81	+1·66	+1·74	+1·18	+0·63
June	-1·77	-2·62	-3·77	-4·66	-7·24	-7·92	-8·05	*-8·27*	-6·67	-3·06	+0·81	+4·59	+7·17	*+8·30*	+8·00	+6·57	+4·60	+3·93	+2·84	+2·54	+2·58	+2·29	+0·98	-1·17
July	-1·67	-2·96	-3·76	-4·22	-6·06	-8·15	*-8·20*	-7·88	-6·94	-4·97	-1·88	+2·75	+6·80	*+8·37*	+8·09	+6·94	+4·95	+3·70	+3·03	+3·51	+3·70	+2·71	+1·34	+0·80
Aug.	-2·68	-4·05	-5·42	-5·20	-4·99	-6·16	*-6·78*	-6·44	-5·63	-4·39	-1·67	+4·85	+8·55	*+9·84*	+9·01	+6·42	+4·13	+3·23	+2·35	+2·32	+2·18	+0·78	+0·36	-0·61
Sept.	*-7·31*	-6·66	-7·28	-5·78	-3·47	-2·62	-3·96	-5·50	-4·14	-1·59	+2·83	+6·01	+8·89	*+9·31*	+8·38	+7·35	+4·68	+4·41	+4·05	+1·90	-0·54	-2·11	-3·26	-3·59
Oct.	*-5·87*	-5·30	-4·80	-4·60	-2·96	-1·89	-0·55	-1·92	-2·95	-2·10	+1·72	+5·02	+7·37	*+8·35*	+7·55	+4·25	+4·67	+4·05	+2·59	+1·52	-1·15	-2·91	-4·68	-5·41
Nov.	-3·76	-3·87	-2·55	-1·67	-1·73	-1·50	-0·99	-0·97	-1·54	-1·37	+0·87	+2·99	+4·33	*+5·44*	+4·82	+4·53	+3·19	+2·17	+1·83	+0·58	-0·02	-2·89	*-4·16*	-3·73
Dec.	-3·53	-3·26	-1·97	-1·06	-1·17	-0·87	+0·12	-0·02	-0·60	-0·36	+0·83	+2·21	+3·83	*+4·61*	+4·51	+3·77	+2·70	+2·24	+1·35	+0·10	-1·78	-3·21	-3·77	*-4·67*
Year	-3·19	-3·74	-3·93	-3·62	-3·65	-3·69	-3·74	-4·28	*-4·34*	-2·59	+0·21	+3·69	+6·47	*+7·48*	+6·98	+5·52	+3·97	+3·19	+2·33	+1·70	+0·52	-0·73	-1·86	-2·69
Winter	-2·99	-3·23	-2·59	-1·59	-1·53	-1·26	-0·85	-1·05	-1·67	-1·31	+0·26	+2·25	+4·00	*+5·03*	+4·79	+4·23	+3·04	+2·52	+1·79	+0·55	-0·87	-2·41	-3·53	*-3·58*
Equinox	-4·79	-5·09	*-5·45*	-4·71	-3·26	-2·44	-2·61	-4·02	-4·70	-2·75	+0·80	+4·45	+7·73	*+8·62*	+8·01	+6·13	+4·65	+3·83	+2·77	+2·00	-0·10	-1·66	-3·01	-4·40
Summer	-1·80	-2·91	-3·75	-4·56	-6·15	-7·35	*-7·77*	*-7·77*	-6·64	-3·71	-0·43	+4·37	+7·67	*+8·80*	+8·13	+6·20	+4·21	+3·21	+2·42	+2·55	+2·53	+1·88	+0·97	-0·09

VERTICAL FORCE

	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
Jan.	-7·5	-11·4	-9·3	-12·8	*-25·0*	-17·8	-15·1	-10·7	-5·6	-1·9	+2·0	+3·0	+2·5	+2·9	+5·5	+11·7	+16·3	+19·7	*+20·6*	+17·8	+11·2	+5·7	+2·0	-3·8
Feb.	-13·0	-17·7	-22·7	*-22·9*	-17·7	-16·2	-10·8	-6·1	-1·3	0·0	+2·1	+3·0	+6·0	+9·3	+12·1	+17·9	+17·7	*+20·4*	+19·7	+16·9	+12·9	+4·0	-2·9	-10·7
Mar.	-37·3	-48·4	-48·9	*-50·5*	-44·5	-42·6	-29·3	-15·7	-3·1	+6·3	+9·6	+10·6	+17·8	+28·3	+38·1	+42·7	*+52·1*	+51·0	+31·6	+20·9	+23·9	+3·4	-3·9	-12·1
Apr.	*-27·3*	-18·2	-18·0	-14·5	-12·3	-14·5	-13·2	-8·2	-4·0	-0·8	+0·6	+2·2	+1·2	+9·3	+14·2	+21·2	+31·5	*+32·0*	+22·7	+13·2	+10·9	+0·3	-6·5	-21·8
May	-16·3	-18·1	-23·1	*-25·4*	-17·4	-8·7	-4·8	-2·2	-0·4	-4·5	-7·2	-7·3	-2·6	+4·1	+13·6	+23·2	+27·1	*+28·2*	+26·2	+20·6	+15·9	+4·2	-8·7	-16·4
June	-28·5	-32·3	-33·2	*-35·9*	-32·2	-22·3	-15·0	-9·6	-5·8	-3·0	-2·1	-1·2	+2·7	+9·9	+16·9	+26·9	+38·0	*+38·3*	+36·5	+28·9	+21·5	+13·4	+1·9	-13·8
July	-13·7	-22·3	*-26·2*	-25·8	-20·7	-12·2	-6·3	-5·5	-5·4	-6·1	-4·9	-4·6	-5·3	-0·4	+9·3	+16·3	+22·6	*+28·3*	+26·0	+24·7	+17·0	+13·0	+7·4	-5·2
Aug.	-37·7	*-57·6*	-49·7	-43·3	-30·0	-26·2	-17·8	-12·5	-6·5	+0·8	+7·1	+2·7	+7·2	+21·9	+32·3	+50·7	*+62·0*	+54·5	+39·1	+25·3	+14·4	-3·1	-9·3	-24·3
Sept.	*-60·5*	-48·5	-43·4	-42·9	-39·9	-34·1	-21·2	-6·2	0·0	+5·6	+11·4	+18·3	+24·3	+32·3	+35·1	+42·5	+51·0	*+59·2*	+45·5	+28·3	+15·3	-4·2	-27·8	-40·1
Oct.	-34·1	*-49·6*	-44·9	-33·9	-30·6	-30·3	-20·2	-8·3	+2·2	+8·5	+11·5	+15·8	+20·8	+30·2	+36·4	+42·8	*+47·3*	+46·1	+45·5	+26·4	+11·2	-10·4	-37·0	-45·4
Nov.	-15·2	-19·9	*-21·7*	-18·8	-14·1	-13·3	-11·4	-8·0	-5·1	-1·7	-1·4	+1·9	+4·7	+9·4	+18·2	+21·9	+21·0	*+24·4*	+22·7	+19·2	+9·6	+0·2	-8·5	-14·1
Dec.	-7·7	-14·4	-14·7	*-16·1*	-15·6	-13·1	-13·2	-8·9	-6·0	-4·5	-3·0	-1·4	0·0	+2·5	+8·9	+13·1	+18·0	*+21·3*	+21·1	+20·7	+12·7	+5·3	-0·8	-4·2
Year	-24·9	*-29·9*	-29·7	-28·6	-25·0	-20·9	-14·9	-8·5	-3·4	-0·1	+2·2	+3·6	+6·6	+13·3	+20·1	+27·6	+33·7	*+35·3*	+29·8	+21·9	+14·7	+2·7	-7·8	-17·7
Winter	-10·9	-15·9	-17·1	-17·7	*-18·1*	-15·1	-12·6	-8·4	-4·5	-2·0	-0·1	+1·6	+3·3	+6·0	+11·2	+16·1	+18·3	*+21·5*	+21·0	+18·7	+11·6	+3·8	-2·5	-8·2
Equinox	-39·8	*-41·2*	-38·8	-35·5	-31·8	-30·4	-21·0	-9·6	*-1·2*	+4·9	+8·3	+11·7	+16·0	+25·0	+30·9	+37·3	+45·5	*+47·1*	+36·3	+22·2	+15·3	-2·7	-18·8	-29·9
Summer	-24·1	-32·6	*-33·1*	-32·6	-25·1	-17·3	-11·0	-7·5	-4·5	-3·2	-1·8	-2·6	+0·5	+8·9	+18·0	+29·3	*+37·4*	+37·3	+31·9	+24·9	+17·2	+6·9	-2·2	-14·9

INTERNATIONAL QUIET DAYS

Departures from the mean of the 24 hourly values (uncorrected for non-cyclic change)

58 LERWICK

HORIZONTAL FORCE

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
Jan.	+0·4	+1·0	+1·1	+1·8	+2·8	+4·8	+5·0	+3·8	+1·1	−6·2	−10·2	*−12·0*	−11·4	−6·2	−3·3	−1·0	+1·8	+4·0	+5·8	*+6·2*	+5·5	+4·0	+0·8	+0·4
Feb.	+7·6	+7·7	+8·8	+9·6	+10·4	*+11·3*	+10·6	+8·0	+1·0	−16·9	−24·0	*−29·8*	−27·8	−20·5	−11·2	−4·8	−1·2	+2·9	+7·2	+10·2	+11·0	+10·9	+10·2	+8·8
Mar.	+7·5	+6·0	+5·1	+8·7	+9·7	+11·8	+11·1	+8·9	−2·1	−23·0	−29·7	*−32·7*	−29·7	−17·0	−12·7	−6·5	+1·1	+4·6	+10·1	+6·7	+18·7	*+18·8*	+13·9	+10·7
Apr.	+12·0	+10·2	+8·5	+7·2	+5·0	+8·0	+4·4	−3·6	−12·3	−28·0	−38·4	*−44·0*	−40·2	−27·4	−12·9	−3·0	+7·2	+15·6	+21·0	+23·0	*+23·3*	+23·0	+20·6	+20·8
May	+9·6	+7·4	+5·8	+5·8	+7·8	+6·5	−3·0	−14·8	−28·6	−40·6	*−44·0*	−41·8	−30·6	−18·6	−6·2	+5·8	+17·2	+25·5	*+28·4*	*+28·4*	+26·8	+22·2	+17·2	+13·8
June	−1·8	+3·9	+6·8	+8·7	+7·1	−2·2	−12·5	−17·9	−24·4	−33·3	−36·6	*−36·9*	−31·4	−18·3	−5·8	+6·1	+13·9	+22·8	+34·1	*+34·9*	+28·8	+25·1	+18·6	+10·3
July	+5·0	+4·5	+4·0	+8·0	+8·6	+1·9	−11·6	−23·8	−25·2	−39·9	−43·4	*−44·2*	−33·4	−18·3	−5·6	+12·4	+24·0	+31·3	+37·2	*+38·4*	+31·2	+24·1	+16·0	+8·8
Aug.	+15·8	+15·1	+9·2	+12·6	+13·8	+7·5	0·0	−9·0	−21·8	−39·5	*−52·2*	−50·2	−41·0	−24·1	−6·6	+3·6	+13·0	+18·3	+21·2	+24·0	*+26·4*	+26·3	+20·0	+17·6
Sept.	+10·4	+9·6	+12·7	+9·6	+8·0	+4·6	−1·0	−11·6	−26·1	−36·6	*−41·0*	−40·2	−34·0	−25·2	−11·9	+0·2	+14·4	+25·2	+30·0	*+34·6*	+29·7	+21·8	+13·8	+3·0
Oct.	+8·8	+7·3	+8·0	+9·3	+8·9	+9·2	+5·3	+0·5	−9·6	−23·9	−33·0	*−33·5*	−25·6	−16·3	−6·6	−1·5	+5·9	+7·6	+9·7	+13·5	+14·0	+14·1	*+14·6*	+13·3
Nov.	+2·1	+3·4	+2·2	+3·7	+3·8	+2·8	+2·1	−0·4	−5·0	−12·1	−16·2	*−18·8*	−14·7	−8·2	−3·2	+0·3	+3·6	+6·2	*+10·1*	+9·2	+8·6	+7·5	+6·6	+6·4
Dec.	+1·5	+1·2	+0·5	+1·5	+3·1	+3·6	*+5·5*	+2·9	+1·3	−3·0	−7·3	*−8·7*	−8·1	−7·0	−5·5	−3·5	−1·7	+1·4	+3·5	+4·1	+4·9	+3·2	+3·3	+3·3
Year	+6·6	+6·4	+6·1	+7·2	+7·4	+5·8	+1·3	−4·7	−13·5	−25·3	−31·3	*−32·7*	−27·3	−17·3	−7·6	+0·7	+8·3	+13·8	+18·2	*+19·4*	+19·1	+16·7	+13·0	+9·8
Winter	+2·9	+3·3	+3·1	+4·1	+5·0	+5·6	+5·8	+3·6	−0·4	−9·5	−14·4	*−17·3*	−15·5	−10·5	−5·8	−2·3	+0·6	+3·6	+6·7	*+7·4*	+7·3	+6·4	+5·2	+4·7
Equinox	+9·7	+8·3	+8·6	+8·7	+7·9	+8·4	+4·9	−1·5	−12·5	−27·9	−35·5	*−37·6*	−32·4	−21·5	−11·0	−2·7	+7·1	+13·3	+17·7	+19·5	*+21·4*	+19·4	+15·7	+11·9
Summer	+7·1	+7·7	+6·5	+8·8	+9·3	+3·4	−6·8	−16·4	−27·5	−38·3	*−44·1*	−43·3	−34·1	−19·8	−6·1	+7·0	+17·0	+24·5	+30·2	*+31·4*	+28·3	+24·4	+17·9	+12·6

DECLINATION

	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′
Jan.	−0·68	−0·63	−0·38	−0·12	−0·20	−0·65	−1·06	−1·38	*−1·68*	−1·39	−0·74	+0·58	+1·56	*+2·11*	+1·74	+1·58	+1·32	+1·39	+0·84	+0·32	−0·20	−0·49	−0·84	−1·00
Feb.	−0·04	−0·17	+0·02	−0·26	−0·58	−1·07	−1·84	−2·94	−4·70	*−5·01*	−2·58	+0·38	+2·50	*+3·67*	+3·58	+2·58	+1·88	+1·43	+1·42	+1·26	+1·04	−0·21	−0·36	0·00
Mar.	−1·86	−1·15	−1·72	−1·97	−2·59	−2·98	−3·97	−4·67	*−5·10*	−3·87	−1·06	+3·63	+7·18	*+8·41*	+7·16	+4·73	+3·27	+1·28	+0·59	+0·61	+0·22	−1·11	−2·86	−2·17
Apr.	−0·43	−1·07	−1·43	−1·73	−1·39	−3·76	−5·25	−6·93	*−7·17*	−5·41	−2·15	+2·33	+5·65	*+7·73*	+7·27	+5·49	+3·83	+2·20	+1·41	+1·15	+0·77	−0·51	−0·35	−0·25
May	+1·54	+0·71	−0·39	−2·56	−4·97	−7·17	−8·96	*−9·05*	−8·47	−5·22	−0·61	+3·65	+6·48	*+7·49*	+6·69	+4·92	+3·09	+1·75	+1·64	+2·03	+2·29	+1·86	+1·95	+1·31
June	+0·64	−0·19	−1·46	−4·11	−6·71	−8·40	*−8·47*	−8·39	−7·66	−4·45	−0·64	+3·65	+7·04	*+8·39*	+7·92	+6·21	+3·93	+2·30	+1·69	+1·87	+1·70	+1·61	+1·82	+1·71
July	−0·62	−1·24	−3·00	−4·46	−5·72	−7·57	*−8·52*	−8·10	−7·46	−4·48	−0·68	+3·56	+7·32	*+8·32*	+7·40	+6·36	+5·08	+3·31	+2·62	+2·30	+2·42	+1·88	+1·30	−0·02
Aug.	−0·96	−2·57	−3·89	−3·28	−5·99	−8·05	*−8·12*	−8·11	−7·73	−5·08	−1·43	+3·63	+8·84	*+10·65*	+9·63	+7·30	+5·01	+2·71	+2·02	+1·97	+1·75	+1·74	+0·71	−0·75
Sept.	−2·84	−3·57	−4·27	−4·32	−3·77	−4·81	−6·48	*−7·11*	−6·65	−3·84	+0·39	+4·97	+8·22	*+8·77*	+7·95	+5·78	+3·91	+2·65	+2·84	+3·25	+2·93	+0·46	−1·67	−2·79
Oct.	−1·32	−1·88	−1·67	−1·90	−2·52	−2·90	−3·22	−3·86	*−4·31*	−3·64	−0·74	+1·92	+3·44	*+3·80*	+3·63	+2·50	+2·46	+3·10	+2·54	+2·26	+1·75	+0·82	+0·06	−0·32
Nov.	−1·14	−1·81	−1·05	−1·28	−1·23	−1·55	−1·92	−2·33	−2·83	−2·06	+0·55	+2·19	*+3·10*	+3·01	+2·83	+2·38	+1·97	+1·83	+2·24	+1·35	+1·27	+0·08	−1·71	*−3·89*
Dec.	−2·10	−1·56	−1·45	−1·42	−1·18	−0·94	−1·36	−0·86	−1·21	−0·80	+0·12	+1·32	+2·60	+3·82	*+3·95*	+2·88	+1·84	+1·14	+0·92	+0·12	−0·67	−1·26	−1·80	*−2·10*
Year	−0·82	−1·26	−1·72	−2·28	−3·07	−4·15	−4·93	−5·31	*−5·41*	−3·77	−0·80	+2·65	+5·33	*+6·35*	+5·81	+4·39	+3·13	+2·09	+1·73	+1·54	+1·27	+0·41	−0·31	−0·86
Winter	−0·99	−1·04	−0·71	−0·77	−0·80	−1·05	−1·54	−1·88	*−2·61*	−2·31	−0·66	+1·12	+2·44	*+3·15*	+3·02	+2·35	+1·75	+1·45	+1·35	+0·76	+0·36	−0·47	−1·18	−1·75
Equinox	−1·61	−1·92	−2·27	−2·48	−2·57	−3·61	−4·73	−5·64	*−5·81*	−4·19	−0·89	+3·21	+6·12	*+7·18*	+6·50	+4·62	+3·37	+2·31	+1·84	+1·82	+1·42	−0·08	−1·21	−1·38
Summer	+0·15	−0·82	−2·18	−3·60	−5·85	−7·80	*−8·52*	−8·41	−7·83	−4·81	−0·84	+3·62	+7·42	*+8·71*	+7·91	+6·20	+4·28	+2·52	+1·99	+2·04	+2·04	+1·77	+1·44	+0·56

VERTICAL FORCE

	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
Jan.	−1·8	−2·2	−1·8	−1·2	−1·2	−0·9	−0·6	−0·4	−0·4	−1·0	0·0	−1·8	*−3·8*	−2·0	−1·2	0·0	+0·6	+1·9	+3·6	*+3·8*	+3·4	+3·2	+2·6	+1·2
Feb.	−1·9	0·0	+0·3	+0·1	+0·1	+0·4	+0·9	+1·7	*+4·5*	+4·2	+3·1	+2·1	+0·1	−2·4	*−4·3*	−2·7	−1·1	+0·2	+0·3	−0·5	−0·3	−0·4	−1·3	−3·1
Mar.	*−10·6*	−9·9	−3·4	−2·7	+0·3	−2·6	−0·3	+0·1	+3·0	+4·7	+2·6	−1·7	−4·0	−2·3	+3·4	+5·5	+8·1	*+8·6*	+5·3	+1·9	+0·6	−0·3	−2·8	−3·5
Apr.	+1·4	+5·0	+6·8	*+8·8*	+2·6	−0·9	+1·8	+2·0	+2·0	+1·0	−1·8	−4·8	−7·6	*−7·8*	−3·8	−1·4	−1·2	+0·5	+2·0	+1·0	−0·6	−1·4	−1·8	−1·8
May	+2·4	+3·5	+5·2	+8·0	*+8·8*	+7·1	+7·4	+3·8	−2·6	−7·3	−12·2	−15·2	*−16·0*	−12·3	−7·0	−0·2	+3·4	+6·9	+6·2	+5·2	+4·2	+2·1	0·0	−1·4
June	−6·4	−7·0	−4·5	+1·8	+4·4	+5·6	+3·6	−0·2	−1·9	−2·0	−2·8	−4·8	−7·4	−5·8	−0·7	+5·0	*+10·6*	+7·8	+4·2	+5·4	+5·7	+1·6	−1·8	*−10·4*
July	+2·2	+0·7	+0·2	+3·7	+3·2	+4·7	+5·2	+4·1	+1·6	−6·7	−8·4	−10·1	*−13·2*	−12·3	−10·0	−7·9	0·0	+8·1	*+10·4*	+9·5	+7·0	+5·1	+3·6	−0·7
Aug.	−6·3	*−13·6*	−9·6	−5·7	−1·6	+3·0	+2·9	+2·2	+1·0	−1·7	−4·6	−8·0	−8·1	−4·4	+4·2	+10·5	*+11·2*	+8·6	+6·9	+3·6	+2·6	+2·1	+2·8	+2·0
Sept.	−3·8	−10·9	−7·2	−2·5	−1·9	+0·2	+3·1	+3·9	+3·8	+0·7	−4·2	−7·7	−6·4	−5·7	−3·0	+1·5	+6·3	+9·6	+7·1	+8·3	*+12·0*	+9·3	+1·4	*−13·9*
Oct.	+3·4	*+4·6*	+3·6	+1·4	−0·2	+0·1	+1·0	−0·6	+2·6	+3·6	+0·2	−2·0	*−3·2*	−2·6	−2·4	−0·2	−2·6	−1·5	+0·8	−1·4	−1·6	−0·6	−1·8	−0·6
Nov.	+2·2	+1·6	+1·8	0·0	−0·4	+0·4	0·0	+1·8	*+3·6*	+3·2	0·0	0·0	−1·2	−2·4	−2·4	−1·6	−3·2	−3·0	−2·4	+2·6	+3·4	+3·4	+2·2	*−9·6*
Dec.	+0·5	−1·2	−1·1	−2·0	−2·8	−2·3	−2·4	−2·0	−2·5	−1·2	−2·3	−4·2	*−6·1*	−5·4	−2·7	+2·2	+5·2	+5·3	+5·4	*+7·0*	+5·7	+4·6	+2·1	+0·2
Year	−1·6	−2·5	−0·8	+0·8	+0·9	+1·2	+1·9	+1·4	+1·2	−0·2	−2·5	−4·9	*−6·4*	−5·5	−2·5	+0·9	+3·1	*+4·4*	+4·1	+3·9	+3·5	+2·4	+0·4	−3·5
Winter	−0·3	−0·5	−0·2	−0·8	−1·1	−0·6	−0·5	+0·3	+1·3	+1·3	+0·2	−1·0	−2·7	*−3·1*	−2·7	−0·5	+0·4	+1·1	+1·7	*+3·2*	+3·1	+2·7	+1·4	−2·8
Equinox	−2·4	−2·8	−0·1	+1·3	+0·2	−0·8	+1·4	+1·3	+2·9	+2·5	−0·8	−4·1	*−5·3*	−4·6	−1·5	+1·3	+2·7	*+4·3*	+3·8	+2·5	+2·6	+1·7	−1·3	−4·9
Summer	−2·0	−4·1	−2·2	+1·9	+3·7	+5·1	+4·8	+2·5	−0·5	−4·4	−7·0	−9·5	*−11·2*	−8·7	−3·4	+1·9	+6·3	*+7·9*	+6·9	+5·9	+4·9	+2·7	+1·1	−2·6

INTERNATIONAL DISTURBED DAYS

Departures from the mean of the 24 hourly values (uncorrected for non-cyclic change)

59 LERWICK

HORIZONTAL FORCE

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
Jan.	-11·2	-4·4	-3·6	-15·8	*-33·2*	-28·5	-21·6	-21·2	-20·8	-28·0	-31·8	-13·0	+3·2	+18·8	+33·2	+52·0	+42·4	*+65·7*	+63·4	-1·2	-18·2	-6·0	-4·4	-15·8
Feb.	-45·1	-18·6	-51·6	-38·5	-10·2	+7·8	+13·5	+10·0	-0·6	-15·9	-21·8	-29·2	-14·5	+15·6	+58·4	+53·5	*+80·4*	+57·8	+49·5	+15·0	+13·6	-36·7	-20·8	*-71·6*
Mar.	-56·1	-96·1	-99·3	-77·9	+1·5	+15·4	-1·9	-23·7	-14·1	-34·5	+3·5	+21·5	+39·3	+91·9	+160·5	+202·1	*+211·3*	+167·4	+119·1	+36·7	-61·1	-151·5	-209·1	*-244·9*
Apr.	-52·5	-14·4	-23·1	-6·3	-1·5	-18·2	-17·7	-26·9	-24·1	-36·4	-33·9	-24·5	-8·3	+11·2	+8·9	+90·9	+86·9	+78·2	*+117·3*	+80·9	-31·7	-13·6	*-90·9*	-50·3
May	+2·3	-45·7	-66·7	*-84·1*	-34·5	+5·0	+3·1	-7·1	-43·7	-30·1	-34·7	-25·3	-3·7	+22·7	+36·3	+25·7	+30·1	+39·8	+49·3	*+60·7*	+53·7	+34·5	+12·3	+0·1
June	-106·2	-49·5	-61·2	*-108·2*	-49·4	-27·3	-29·0	-41·6	-57·2	-43·1	-37·6	-28·0	+1·6	+15·1	+27·8	+48·8	+64·4	+113·5	*+123·6*	+90·6	+75·2	+47·9	+29·2	-0·4
July	-99·1	*-140·1*	-78·5	-51·9	-15·5	+0·7	-24·3	-34·9	-35·1	-50·5	-58·7	-55·7	-37·5	+17·9	+58·9	+91·9	+106·7	+111·9	*+131·9*	+106·1	+90·9	+21·7	+4·9	-60·7
Aug.	-111·2	*-180·9*	-82·6	-41·3	-30·2	-43·3	-14·2	-11·1	-22·2	-59·3	-54·4	-15·3	+14·2	+74·7	+126·2	+139·5	*+149·2*	+113·9	+93·4	+60·9	+39·8	-0·3	-56·6	-88·9
Sept.	-117·9	-167·2	-91·9	-62·8	-60·8	-35·1	-41·8	-29·6	-31·9	-33·4	-18·5	+3·4	+40·9	+89·4	+181·9	+260·4	*+299·6*	+268·9	+103·6	+8·6	-63·9	*-181·6*	-161·3	-159·0
Oct.	-82·7	-131·8	-58·1	+2·9	+4·9	-3·0	-23·7	-16·7	-22·7	-23·6	-23·7	-3·7	+24·9	+64·2	+94·3	+157·7	*+173·5*	+148·2	+92·5	+16·7	-22·7	-71·2	-143·5	*-152·7*
Nov.	*-121·3*	-108·1	-4·0	+19·3	+20·1	+15·9	+9·5	+11·5	+9·0	+3·3	+4·3	+15·5	+10·1	+49·7	+87·6	+66·5	*+89·5*	+66·5	+35·5	+27·9	-14·4	-78·5	-118·1	-97·3
Dec.	-11·2	*-19·3*	-12·5	-3·0	+9·1	+11·7	+8·0	+7·9	+6·1	-4·8	-10·3	-11·1	-12·2	-9·7	-4·1	+4·8	+8·5	+10·9	*+19·4*	+15·9	-1·3	+1·2	-2·5	-1·5
Year	-67·7	*-81·3*	-52·8	-39·0	-16·6	-8·2	-11·7	-15·3	-21·0	-29·7	-26·5	-13·9	+4·8	+38·5	+72·5	+99·5	*+111·9*	+103·6	+83·2	+43·2	+5·0	-36·2	-63·4	-78·6
Winter	*-47·2*	-37·6	-17·9	-9·5	-3·5	+1·7	+2·3	+2·1	-1·6	-11·3	-14·9	-9·5	-3·3	+18·6	+43·8	+44·2	*+55·2*	+50·2	+41·9	+14·4	-5·1	-30·0	-35·5	-46·5
Equinox	-77·3	-102·4	-68·1	-36·0	-14·0	-10·2	-21·3	-24·2	-23·2	-32·0	-18·1	-0·8	+24·2	+64·2	+111·4	+177·8	*+192·8*	+165·7	+108·1	+35·7	-44·9	-104·5	-151·2	*-151·7*
Summer	-78·5	*-104·1*	-72·3	-71·4	-32·4	-16·2	-16·1	-23·7	-39·5	-45·7	-46·3	-31·3	-6·3	+32·9	+62·3	+76·5	+87·6	+94·8	*+99·5*	+79·6	+64·9	+25·9	-2·5	-37·5

DECLINATION

	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′
Jan.	-3·12	-4·36	-2·94	-1·14	-3·62	-1·34	-1·08	-0·66	-1·24	-1·72	-0·08	+2·06	+4·50	+5·66	+6·82	*+8·08*	+3·86	+6·72	+0·58	-2·14	-4·28	-2·78	-3·32	*-4·46*
Feb.	-4·59	-6·98	-10·39	-5·69	-2·71	-2·16	-1·13	-1·39	-2·25	+0·08	+1·79	+4·61	+7·39	+9·96	*+11·17*	+10·45	+9·91	+6·22	+5·15	+1·61	-3·77	-7·52	*-10·81*	-8·95
Mar.	-6·37	-13·76	-16·26	-9·37	-4·78	-2·36	+2·59	+2·70	-2·46	-0·75	-2·26	+4·22	+9·79	+9·48	+9·60	+9·81	+9·98	*+15·38*	+13·73	+11·94	-1·22	-6·09	-8·66	*-24·88*
Apr.	-5·43	*-8·01*	-6·36	-6·25	-5·73	-3·01	-3·69	-4·61	-5·26	-2·41	+0·15	+1·85	+6·45	+8·23	*+9·56*	+7·11	+6·13	+4·79	+4·81	+8·27	+6·00	+1·05	-6·55	-7·09
May	-2·64	-6·99	-3·72	-5·81	*-11·11*	-9·38	-7·37	-8·79	-10·78	+1·35	+2·24	+7·09	*+9·42*	+9·19	+8·54	+6·77	+6·39	+4·16	+3·11	+2·11	+1·16	+2·11	+3·04	-0·09
June	-0·86	-6·04	-6·40	-4·24	*-10·98*	-7·99	-8·02	-10·84	-6·94	-0·70	+4·68	+6·28	+6·56	*+6·76*	+6·30	+6·38	+4·54	+6·13	+3·96	+3·20	+3·54	+3·38	+1·34	-0·04
July	-2·75	-8·39	-3·55	-6·75	-8·87	*-11·14*	-10·79	-8·89	-7·49	-6·49	-4·53	+2·09	+6·91	+7·35	+6·23	+4·57	+3·47	+5·12	+7·03	+8·95	*+10·93*	+7·73	+3·93	+5·33
Aug.	-5·36	-5·72	-8·36	*-8·64*	-5·28	-2·40	-4·40	-6·94	-5·54	-9·50	-10·18	+5·18	*+9·58*	+8·32	+9·10	+6·94	+5·16	+6·16	+5·00	+3·90	+5·64	+1·86	+3·44	+2·04
Sept.	-14·94	-16·98	*-18·95*	-12·08	-1·96	-3·22	-5·40	-8·60	-6·97	+0·48	+8·64	+9·48	+11·58	+11·46	+10·53	+13·44	+12·06	*+15·22*	+8·50	+4·98	-4·53	-5·72	-4·84	-2·18
Oct.	-11·48	*-13·83*	-12·22	-9·04	-5·48	-1·93	+1·60	+4·42	+2·40	+0·79	+5·40	+8·12	+11·06	*+12·01*	+9·24	+6·84	+10·54	+9·59	+6·46	+0·84	-3·78	-7·53	-11·66	-12·36
Nov.	-9·15	-10·67	-8·10	-2·25	-1·39	-0·09	+2·13	+2·15	-0·14	-0·41	+3·29	+5·97	+7·29	+10·27	+6·28	*+10·43*	+6·11	+1·21	+2·09	+1·07	+0·24	-10·37	*-11·43*	-4·53
Dec.	-5·83	-8·46	-4·59	-2·20	-0·71	-0·20	+1·15	+1·30	+1·21	+1·52	+2·27	+4·34	+6·73	*+7·42*	+7·41	+6·54.	+4·95	+1·96	+1·91	-0·88	-3·53	-7·76	*-8·59*	-5·96
Year	-6·04	*-9·18*	-8·49	-6·12	-5·22	-3·77	-2·87	-3·35	-3·79	-1·48	+0·95	+5·11	+8·11	*+8·84*	+8·40	+8·11	+6·93	+6·89	+5·19	+3·65	+0·53	-2·64	-4·50	-5·26
Winter	-5·67	-7·62	-6·51	-2·82	-2·11	-0·95	+0·27	+0·35	-0·61	-0·13	+1·82	+4·25	+6·48	+8·33	+7·92	*+8·87*	+6·21	+4·03	+2·43	-0·09	-2·83	-7·11	*-8·54*	-5·97
Equinox	-9·55	-13·15	*-13·45*	-9·19	-4·49	-2·63	-1·23	-1·52	-3·07	-0·47	+2·98	+5·92	+9·72	+10·29	+9·73	+9·30	+9·68	*+11·25*	+8·37	+6·51	-0·88	-4·57	-7·93	-11·63
Summer	-2·90	-6·79	-5·51	-6·36	*-9·06*	-7·73	-7·65	-8·87	-7·69	-3·83	-1·95	+5·16	*+8·12*	+7·91	+7·54	+6·17	+4·89	+5·39	+4·77	+4·54	+5·32	+3·77	+2·94	+1·81

VERTICAL FORCE

	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
Jan.	-21·6	-15·4	-11·8	-34·8	*-104·8*	-67·5	-62·4	-44·6	-31·0	-10·4	+1·0	+9·6	+11·8	+14·2	+19·6	+44·8	+65·0	*+76·3*	+70·2	+49·4	+20·4	+11·4	+10·4	+0·2
Feb.	+4·5	-33·7	-62·8	*-65·1*	-52·5	-55·5	-36·7	-23·7	-14·2	-13·7	-3·9	+4·3	+21·3	+33·1	+39·8	+63·7	+61·5	*+73·9*	+68·7	+49·5	+33·6	-12·5	-27·5	-52·1
Mar.	-47·2	-79·0	*-92·4*	-67·4	-73·8	-53·9	-48·2	-41·6	-26·6	-02·4	+18·4	+27·0	+50·0	+83·0	*+96·4*	+70·8	+70·0	+67·3	-8·2	-13·6	+50·4	-22·8	+16·6	+27·2
Apr.	*-74·2*	-41·9	-33·0	-22·1	-17·4	-27·3	-39·2	-27·3	-20·8	-5·7	+6·6	+25·7	+21·4	+34·5	+37·0	+50·3	*+76·0*	+73·3	+26·4	-9·1	+11·8	-16·5	+2·8	-31·3
May	-19·4	-59·4	-83·7	*-112·2*	-84·2	-36·6	-15·6	+3·6	+25·7	+16·4	+13·2	+13·8	+33·2	+42·6	+58·1	*+60·4*	+41·8	+37·8	+35·8	+32·8	+26·7	+16·6	-16·4	-31·0
June	-55·6	-69·3	-93·4	*-114·4*	-101·6	-66·9	-49·2	-29·6	-17·8	-10·9	-1·0	+9·8	+19·6	+35·1	+50·2	+66·0	*+81·4*	+79·9	+74·8	+56·8	+47·0	+40·3	+27·0	+21·8
July	-16·0	-57·3	-74·6	*-79·7*	-47·0	-21·7	-17·8	-23·1	-30·4	-19·9	-7·6	-1·9	+1·2	+20·7	+47·0	*+63·3*	+61·6	+53·3	+33·6	+46·7	+26·2	+27·9	+28·6	-13·1
Aug.	-26·0	*-124·0*	-104·7	-77·0	-63·4	-71·4	-55·8	-33·2	-13·1	+9·4	+43·8	+16·2	+27·8	+67·8	+75·7	+104·0	*+113·2*	+99·2	+58·2	+22·0	-1·5	-12·6	+1·0	-55·6
Sept.	-85·1	-40·2	-79·0	-96·1	*-126·4*	-85·6	-53·5	-23·2	-11·4	-1·7	+28·2	+55·2	+75·5	+91·2	+73·0	+77·1	+84·8	*+112·0*	+78·7	+10·6	+25·2	-26·5	-41·2	-41·6
Oct.	-62·8	-92·7	-98·6	-46·5	-51·5	-57·2	-57·1	-33·7	-13·8	+4·1	+19·4	+42·7	+70·0	+101·1	+115·2	+106·7	*+133·5*	+106·4	+87·1	+42·5	+18·4	-39·1	*-152·6*	-141·5
Nov.	-47·7	*-70·8*	-62·8	-40·3	-31·0	-38·4	-34·1	-26·4	-15·6	-2·3	+1·0	+9·4	+23·9	+46·8	+83·4	+85·5	+76·8	*+96·6*	+75·1	+48·4	-8·4	-49·9	-66·4	-52·8
Dec.	-29·5	-39·2	-44·6	*-55·5*	-40·0	-26·0	-18·9	-15·0	-12·4	-9·5	-5·0	+0·4	+5·7	+16·4	+28·2	+29·1	+46·8	*+62·8*	+57·7	+51·4	+13·2	+3·3	-7·6	-11·8
Year	-40·1	-60·2	*-70·1*	-67·6	-66·1	-50·7	-40·7	-26·5	-15·1	-3·9	+9·5	+17·7	+30·1	+48·9	+60·3	+68·5	+76·0	*+78·2*	+54·8	+32·3	+21·9	-6·7	-18·8	-31·8
Winter	-23·6	-39·8	-45·5	-48·9	*-57·1*	-46·9	-38·0	-27·4	-18·3	-9·0	-1·7	+5·9	+15·7	+27·6	+42·7	+55·8	+62·5	*+77·4*	+67·9	+49·7	+14·7	-11·9	-22·8	-29·1
Equinox	-67·3	-63·5	*-75·7*	-58·0	-67·3	-56·0	-49·5	-31·5	-18·1	-1·4	+18·1	+37·7	+54·2	+77·5	+80·4	+76·2	*+91·1*	+89·7	+46·0	+7·6	+26·5	-26·2	-43·6	-46·8
Summer	-29·3	-77·5	-89·1	*-95·8*	-74·1	-49·1	-34·6	-20·6	-8·9	-1·3	+12·1	+9·5	+20·5	+41·5	+57·7	+73·4	*+74·5*	+67·5	+50·6	+39·6	+24·6	+18·1	+10·1	-19·5

RANGE OF MEAN DIURNAL INEQUALITIES FOR THE MONTHS, YEAR AND SEASONS OF 1947

The ranges are derived from the diurnal inequalities printed in Tables 57 to 59

60 LERWICK

	All days			Quiet days			Disturbed days		
	H	*D*	*V*	*H*	*D*	*V*	*H*	*D*	*V*
	γ	′	γ	γ	′	γ	γ	′	γ
Jan.	31·7	5·87	45·6	18·2	3·79	7·6	98·9	12·54	181·1
Feb.	43·2	10·42	43·3	41·1	8·68	8·8	152·0	21·98	139·0
Mar.	121·1	15·05	102·6	51·5	13·51	19·2	456·2	40·26	188·8
Apr.	88·4	15·43	59·3	67·3	14·90	16·6	208·2	17·57	150·2
May	95·1	17·17	53·6	72·4	16·54	24·8	144·8	20·53	172·6
June	101·9	16·57	74·2	71·8	16·86	30·0	231·8	17·74	195·8
July	110·7	16·57	54·5	82·6	16·84	23·6	272·0	22·07	143·0
Aug.	114·7	16·62	119·6	78·6	18·76	24·8	330·1	18·22	237·2
Sept.	145·3	16·62	119·7	75·6	15·88	25·9	481·2	34·17	238·4
Oct.	83·7	14·22	96·9	48·1	8·11	7·8	326·2	25·84	286·1
Nov.	38·1	9·60	46·1	28·9	6·99	13·2	210·8	21·86	167·4
Dec.	19·1	9·28	37·4	14·2	6·05	13·1	38·7	16·01	118·3
Year	73·5	11·82	65·2	52·1	11·76	10·8	193·2	18·02	148·3
Winter	30·2	8·61	39·6	24·7	5·76	6·3	102·4	17·41	170·3
Equinox	94·1	14·07	88·3	59·0	12·99	9·6	344·5	24·70	166·8
Summer	102·2	16·57	70·4	75·5	17·23	19·1	203·6	17·18	134·5

AVERAGE DEPARTURE

Arithmetical average of diurnal inequalities in Tables 57 to 59 taken regardless of sign

61 LERWICK

	All days			Quiet days			Disturbed days		
	H	*D*	*V*	*H*	*D*	*V*	*H*	*D*	*V*
	γ	′	γ	γ	′	γ	γ	′	γ
Jan.	5·8	1·89	10·7	4·2	0·95	1·7	23·2	3·19	33·7
Feb.	10·4	2·91	11·8	11·3	1·65	1·5	31·3	5·69	37·8
Mar.	27·1	4·05	28·0	12·8	3·09	3·7	89·2	8·27	48·1
Apr.	17·1	3·78	13·3	17·5	3·15	2·9	39·5	5·37	30·4
May	23·0	4·09	13·6	19·0	3·95	6·2	31·3	5·56	38·1
June	27·8	4·60	19·8	18·4	4·21	4·7	53·2	5·25	50·8
July	27·8	4·72	13·7	21·3	4·32	5·8	62·0	6·64	34·2
Aug.	30·4	4·50	26·5	20·4	4·66	5·3	67·7	6·03	53·2
Sept.	34·9	4·82	30·7	19·0	4·34	5·6	104·7	8·86	59·3
Oct.	20·5	3·92	28·7	12·5	2·36	1·8	65·0	7·44	70·6
Nov.	10·3	2·56	12·8	6·5	1·90	2·2	45·1	4·88	45·6
Dec.	5·0	2·19	10·3	3·7	1·56	3·2	8·6	4·06	26·3
Year	18·2	3·50	17·6	13·3	2·89	2·5	46·8	5·23	41·5
Winter	7·2	2·37	11·1	6·3	1·48	1·4	22·9	4·25	41·7
Equinox	23·9	4·08	25·1	15·2	3·20	2·4	73·3	6·98	50·4
Summer	26·9	4·41	17·7	19·7	4·22	4·6	52·0	5·69	35·0

NON-CYCLIC CHANGE

52 LERWICK

	All days			Quiet days			Disturbed days		
	H	*D*	*V*	*H*	*D*	*V*	*H*	*D*	*V*
	γ	′	γ	γ	′	γ	γ	′	γ
Jan.	−0·4	−0·32	−0·8	+0·1	−0·08	+1·4	+22·6	−0·89	+17·3
Feb.	+0·1	+0·19	+0·0	+0·5	+0·09	+0·4	−29·9	−3·73	−42·1
Mar.	−0·3	+0·07	+1·6	+7·2	+0·95	+2·7	−162·7	−9·73	+14·5
Apr.	+0·5	+0·31	−0·3	+8·9	+0·00	−3·6	+30·8	+1·21	+44·2
May	−4·6	+0·23	−2·7	+3·2	−1·29	−3·4	−1·5	+0·49	+14·2
June	+5·1	−0·08	+2·5	+8·5	+0·16	−8·6	+26·0	−0·72	+48·6
July	−1·3	−0·23	−1·0	+2·0	+0·06	−7·4	−6·9	+0·53	+4·2
Aug.	+0·7	−0·13	+1·4	+2·4	−0·31	+2·4	−44·8	+1·57	−41·3
Sept.	+0·5	−0·13	+1·3	+0·1	−0·41	−15·3	−27·0	+0·71	−33·3
Oct.	−0·1	−0·11	+1·0	+2·4	+0·27	−3·0	−60·9	−1·79	−37·0
Nov.	−0·5	+0·03	−0·3	+0·3	−2·92	−15·0	−16·6	+0·71	−11·4
Dec.	+0·3	−0·01	−0·3	+2·9	+0·26	−3·5	+5·9	+2·70	+8·3
Year	0·0	−0·01	+0·2	+3·2	−0·27	−4·5	−22·1	−0·75	−1·1
Winter	−0·01	−0·03	−0·3	+0·9	−0·66	−4·2	−4·5	−0·80	−7·0
Equinox	+0·2	+0·03	+0·9	+4·7	+0·20	−5·1	−54·9	−2·40	−2·9
Summer	0·0	−0·05	+0·1	+4·0	−0·35	−4·3	−6·8	+0·47	+6·4

"Winter" comprises the four months January, February, November, December; "Equinox" the months March, April, September, October; and "Summer" May to August.

MEAN MONTHLY AND ANNUAL VALUES OF TERRESTRIAL MAGNETIC ELEMENTS

For all, a, quiet, q, and disturbed, d, days for *H*, *D* and *V* and for all days for N, W, I and T

63 LERWICK

	Horizontal force			Declination (west)			Vertical force			North component all days	West component all days	Inclincation (north) all days	Total force all days
	a	q	d	a	q	d	a	q	d				
	14,000γ +			11° +			46,000γ +						
	γ	γ	γ	′	′	′	γ	γ	γ	γ	γ	° ′	γ
Jan.	360	371	352	12·1	12·6	11·9	991	978	998	14174	2790	73 00·5	49136
Feb.	358	364	343	11·3	11·8	9·3	988	987	998	14172	2786	73 00·5	49133
Mar.	342	353	339	10·3	11·0	10·0	1004	1003	1023	14158	2779	73 01·9	49144
Apr.	362	361	352	10·0	10·1	10·7	1000	998	1009	14177	2782	73 00·5	49145
May	368	366	350	9·5	8·8	8·2	998	1002	978	14184	2781	73 00·0	49145
June	369	373	352	9·3	8·7	10·1	998	1004	983	14185	2780	73 00·0	49145
July	373	373	377	8·8	8·9	9·3	1001	999	1021	14190	2779	72 59·8	49151
Aug.	355	365	333	7·6	8·2	6·3	1001	991	1020	14173	2770	73 01·0	49145
Sept.	341	355	313	6·5	6·3	5·9	1009	1012	1003	14170	2763	73 02·0	49146
Oct.	347	367	327	5·7	6·7	5·3	1014	1012	1015	14166	2761	73 01·8	49155
Nov.	359	370	335	5·5	6·1	4·4	1009	1003	1015	14178	2762	73 00·9	49153
Dec.	367	371	361	5·1	5·4	4·5	1006	1003	1011	14186	2762	73 00·3	49153
Year	358	366	345	8·5	8·7	8·0	1002	999	1006	14175	2775	73 00·8	49146

64 LERWICK

Night commencing				Night commencing				Night commencing			
			JANUARY				APRIL				OCTOBER (contd.)
2	b	..	Fine to fair: bright moonlight	2	b	..	Fair	12	c	..	Cloudy
12	a	⌀	Fine. Faint glow 18h.50m. to 19h.50m.	3	cb	..	Cloudy	13	ca	⌀	Cloudy to fair: slight glow with isolated rays 21h. to 22h.
15	a	⌀	Fine. Moderate glow 20h.50m. to 24h.	4	b	⌀	Fine: moonlight. Faint rayed arc 20h.30m.	14	c-ca	..	Cloudy becoming fair
16	a-c	⌀	Fine. Bright display of homogeneous arcs and rays 18h. to 21h.45m. when sky became overcast	6	cb	..	Cloudy to fair	15	ca	⌀	Variable sky. Glow of moderate intensity with occasional bands 20h.55m. to 22h.55m. when sky became overcast
17	a	⌀	Fair: faint activity 21h. to 23h.	7	a	..	Fair				
18	a	⌀	Fine: moderate activity 22h.30m. to 00h.15m.	8	a	⌀	Fine. Faint activity 24h. to 02h.				
				12	a	..	Fair				
19	a	..	Fine	14	ca	..	Cloudy	16	ca	..	Fair to cloudy
21	a	..	Fine	17	a	⌀	Fair. Intense activity 20h.45m. to 00h.35m. multicoloured rays and coronae	17	ca	⌀	Variable sky: slight glow 20h.45m. to 22h. seen through cloud breaks
22	a	..	Fair					20	cb	..	Fair: moonlight
23	ca-a	..	Cloudy then fair	22	ca	..	Cloudy	21	cb	..	Fair: moonlight
24	ca	⌀	Variable cloud. Moderate glow 18h.50m. to 20h.40m. Green colouration	24	a	..	Fair	30	b-cb	..	Fair becoming cloudy: moonlight
				27	a	..	Fair				
26	cb	⌀	Cloudy with moonlight	29	ca	..	Variable sky				
				30	ca	..	Variable sky				NOVEMBER
			FEBRUARY					1	cb	..	Cloudy: moonlight
							MAY	5	ca	..	Variable sky
9	c-a	⌀	Cloudy becoming fine, homogeneous arc of moderate intensity with glow 21h. to 24h.	20	ca	⌀	Cloudy: faint activity 23h.	6	ca	⌀	Cloudy: slight activity suspected
								7	a	⌀	Fine: slight activity 23h.
								8	a	⌀	Variable sky: moderate glow 24h. to 01h.
11	c-a	..	Cloudy to fair				SEPTEMBER	9	a	⌀	Fair: moderate activity 20h.30m. to 24h. Arcs with rays predominant in early evening. Pulsating surfaces and flaming aurora towards end of watch.
12	a	⌀	Fine: faint glow 20h.20m. to 02h.								
13	c	..	Cloudy								
14	ca	..	Cloudy to fair	1	b	..	Fine				
15	a-c	⌀	Fine becoming cloudy: activity suspected behind cloud. 19h.	5	cb	..	Cloudy				
				6	b	..	Fair to cloudy				
17	c	..	Cloudy	7	b	⌀	Fine: moonlight. Moderate activity 20h.40m. to 24h. Rays and coronae coloured pink	10	a	⌀	Fair. Faint glow and rays 19h.30m. to 24h.
18	ca	⌀	Variable cloud: moderate glow 19h.30m. to 22h.					11	ca	⌀	Variable cloud. Faint glow 19h.45m.
19	a	⌀	Fine: moderate activity 20h. to 24h.20m.	9	b	⌀	Fine: moonlight. Slight activity 21h.25m. to 23h.40m.	12	a	..	Fine
								13	a	..	Fine
21	ca	..	Variable cloud	13	a	⌀	Fair: moderate activity 20h.30m. to 23h.45m. Green and red bands with rays	14	a	..	Fine
24	a	..	Fair					16	c-ca	..	Cloudy
25	a	⌀	Fine: bright arcs with rays and homogeneous arcs 21h.45m. to 22h.					17	ca-c	..	Fair to cloudy
				16	ca	⌀	Cloudy: moderate activity observed through breaks in cloud 02h.15m. to 04h.15m.	18	ca	⌀	Variable sky: slight glow 20h.
26	a	..	Variable cloud					19	c-a	..	Cloudy to fair
27	cb	..	Cloudy: moonlight					22	ca	..	Variable cloud
28	b	..	Fair: moonlight	17	a	⌀	Fine: homogeneous arcs of moderate intensity of green colouration 21h.45m. to 22h.40m: rays and coronae 23h.40m. to 04h.	23	ca	..	Variable cloud
								24	c	..	Cloudy
								25	c-cb	..	Cloudy becoming fair: moonlight
			MARCH					26	b	..	Fine. Moonlight
				18	a	⌀	Fine: moderate activity, green colouration 20h.15m. to 03h.50m.	28	cb	..	Cloudy, bright moonlight
1	b-cb	..	Fine becoming cloudy					29	b	..	Fine: bright moonlight
2	b	⌀	Fine, moonlight. Intense activity 18h.45m. to 02h.30m. Rays coronal and flaming auroral multi-coloured	19	a	..	Fine	30	b-cb	..	Fair to cloudy: moonlight
				21	a	⌀	Fine: moderate activity 21h. to 23h.				
				22	a	⌀	Fair: moderate activity: green colouration 22h.50m. to 02h.				DECEMBER
3	b	⌀	Mainly fair, bright moonlight. Intense activity 19h.15m. to 24h.30m. Rays and coronae	24	ca	⌀	Cloudy: corona seen through gap in clouds 20h.25m. to 20h.30m.	1	b	..	Variable cloud: moonlight
								2	b-cb	..	Fine to cloudy: moonlight
4	cb	..	Variable sky: bright moonlight	27	b	..	Fine moonlight	3	c	..	Cloudy
5	cb-b	..	Cloudy to fine: bright moonlight	29	cb	⌀	Variable sky: moonlight	4	a	..	Fine
6	b	..	Variable sky: moonlight	30	b	⌀	Fine moonlight. Pulsating surface of moderate intensity 22h.30m. Hidden by cloud at 22h.40m.	5	ca	⌀	Variable sky. Faint glow 22h.45m. to 24h.
7	b-cb	⌀	Fair: intense activity 19h.20m. to 23h.30m. Red colouration. Clouded over 23h.30m.					7	a	..	Fair
								8	a	..	Fine
8	a	⌀	Fair: glow					9	ca	⌀	Cloudy: homogeneous arcs of slight intensity 19h.30m. to 21h.
9	a	⌀	Fine. Moderate activity 19h.15m. to 21h.				OCTOBER				
10	a	⌀	Fine. Faint glow 20h. to 21h.45m.	1	b	⌀	Fair: bright moonlight. Faint activity of pink hue 22h.20m. to 00h.30m.	13	a	..	Fine
11	a	⌀	Fine. Faint glow 20h.30m. to 23h.45m.					14	a	..	Fair
12	a	..	Fine	6	c	..	Cloudy	16	ca-a	..	Cloudy becoming fair
13	a	..	Fine	7	a	⌀	Fair: arcs with rays and glow of moderate intensity 20h.40m. to 21h.30m.	17	a	..	Fair
14	a	⌀	Fine. Faint activity 20h. to 21h.45m.					18	c	..	Cloudy
15	a	⌀	Fine. Moderate activity - bundles of rays of greenish colouration 21h.30m. to 22h.15m.	9	ca-a	⌀	Cloudy becoming fine: moderate activity 20h.30m. to 01h.30m.	25	ca-c	..	Fair to cloudy
								26	c	..	Cloudy
				10	ca-c	⌀	Variable sky becoming cloudy: faint glow 20h.10m. arc with rays of bright intensity 20h.30m. to 21h. Corona of green colour	28	c	..	Cloudy
								29	cb	..	Variable cloud: moonlight
								30	b	..	Fair. Moonlight
22	a-c	..	Fine becoming cloudy					31	b	..	Fine. Moonlight
24	a	..	Fine								
25	a	..	Fine								

In the interests of brevity there have been omitted from Table 64 all dates on which the sky throughout the evening remained completely overcast and on which, therefore, no opportunity arose of determining whether or not aurora occurred. The nights on which aurora was actually seen are indicated by the symbol ⌀ . The nights on which aurora was not seen, despite at least an occasional interval of more or less clear sky, are indicated by the symbol .. ; in the latter case also, remarks on the weather are added to assist the reader in judging how far the fact of no observation of aurora may be taken as indicating that there was not actual aurora.

The letters a, b, c, have the following significance:-

a = Conditions favourable for seeing aurora

b = Unfavourable for faint aurora (moonlight, mist, Cs, etc.) but not such as to mask bright aurora

c = Cloudy, but aurora not seen in clear intervals

ca, cb = Have been used for "Cloudy, with conditions a or b in the intervals"

Changing conditions have been indicated by a hyphen, e.g., a-c

65 OTHER SCOTTISH STATIONS

Night commencing		Night commencing		Night commencing	
	JANUARY		MAY		SEPTEMBER (contd.)
15	Stornoway	14	Tiree	22	Nairn; Prestwick; Dyce; Wick; Donibristle 23h.; Point of Sleat 21h. to N.
16	Stornoway				
19	Tiree			23	Prestwick; Dyce; Hatston (N.); Tiree; Wick; Montrose
			JUNE		
				24	Prestwick; Tiree; Duntuilm
	FEBRUARY		Nil	25	Prestwick; Hatston; Tiree
				27	Tiree
8	Stornoway; Duntuilm			28	Prestwick
15	Glenlivet				
16	Nairn; Edinburgh; Tiree 24h.–6h. Auchincruive; Benbecula 24h.–4h. Lossiemouth 24h.		JULY		OCTOBER
		18	Tiree		
17	Benbecula; Prestwick Airport; Donibristle 2h.; Sule Skerry 6h.			2	Tiree; Wick; Fortrose
				3	Tiree; Wick
18	Nairn; Tiree; Auchincruive; Benbecula			4	Tiree
19	Nairn; Paisley; Tiree; Edinburgh		AUGUST	9	Rothesay; Aberdeen 21h. (bright); Edinburgh; Tiree 20h.; Nairn;
20	Benbecula				
25	Nairn; Tiree; Benbecula	14	Hatston		Stornoway; Wick 21h.; Fortrose;
26	Benbecula	15	Edinburgh; Carluke; Tiree; Oban 21h.30m., great display; Prestwick		Buddonness; Leuchars; Hatston;
			Airport; Renfrew; Baltasound;		Prestwick; Wigton; Lossiemouth
			Glenlivet; Aberdeen; Wigton;	10	Nairn
			Lossiemouth 23h.15m.	11	Nairn; Prestwick 01h.
	MARCH			12	Tiree
		16	Wick 24h.; Prestwick Airport 24h.;	13	Wick
2	Nairn; Aberdeen; Fortrose; Glenlivet; Montrose; Stornoway 23h.45m., Hatston		Dyce 24h.; Baltasound; Benbecula;	14	Aberdeen
			Buddonness	15	Nairn; Wick
	23h.; Benbecula; Leuchars 20h.40m.;	18	Benbecula	17	Glenlivet
	Point of Sleat 21h.; Lochboisdale 21h.;	19	Wick; Hatston; Dyce; Benbecula	18	Nairn; Glenlivet
	West Freugh 23h.; Lossiemouth 23h.45m.	20	Wick	19	Wick; Glenlivet; Gordon Castle
3	Fort William; Nairn; Aberdeen 21h.,	23	Benbecula	20	Wick; Glenlivet
	Glenlivet; Fortrose; Montrose; Wick;	24	Edinburgh	21	Stornoway
	Stornoway 20h.54m.; Tiree; Rothesay;	30	Benbecula	28	Buddonness
	Hatston; Benbecula 21h.; Prestwick Airport 1h.; North Berwick; Point of Sleat 21h.; Lochboisdale 21h.				
4	Montrose; Hatston; Leuchars; St. Abbs Head		SEPTEMBER		NOVEMBER
8	Nairn; Stornoway; Spatty; Hatston	7	Aberdeen	3	Aberdeen
	Benbecula; Longforgan	8	Tiree	8	Nairn
9	Nairn; Hatston 20h.; Benbecula;	11	Glenlivet; Hatston 24h. N.	9	Tiree; Nairn; Aberdeen; Wick; Gordon
	Leuchars	12	Glenlivet; Hatston; Tiree		Castle; Glenlivet; Logie-Coldstone;
15	Hatston	13	Gordon Castle; Aberdeen; Prestwick		Benbecula; Dyce; Hatston; Lossie-
24	Benbecula		Airport 22h.; Dyce; Hatston; Tiree		mouth; Rudh Re; Stornoway
25	Hatston		Wick; Glenlivet; Leuchars 20h.45m.;	10	Benbecula; Wick; Aberdeen; Nairn;
27	Hatston		Point of Sleat 21h. N. and W.		Tiree
		14	Paisley; Prestwick; Tiree; Hatston;	11	Wick
			Glenlivet	12	Wick
	APRIL	15	Nairn; Wick	16	Buddonness
		16	Nairn; Aberdeen; Tiree; Fortrose;	18	Tiree; Nairn
9	Tiree; Benbecula		Wick; Glenlivet; Benbecula 24h.		
17	Edinburgh; Paisley; West Linton; Renfrew	17	Nairn; Stirling; Dyce 24h.;		
	21h.; Hatston 20h.50m.; Benbecula		Hatston 3h.; Tiree; Wick; Glenlivet;		
	Donibristle; Stornoway; Dunfermline;		Duntuilm; Lossiemouth 0h.1m.(N.W.)		DECEMBER
	Leuchars 21h.; Lossiemouth 21h.40m.;	18	Dyce 24h.; Hatston; Tiree; Wick;		
	Prestwick Airport		Benbecula 24h.; Stornoway 24h.	5	Hatston
18	Tiree; Benbecula; Wick; Stirling	19	Hatston	9	Edinburgh
19	Benbecula	21	Prestwick (N.W.); Hatston	28	Dyce

ABERDEEN

ABERDEEN OBSERVATORY

Latitude	57°10′N.
Longitude	2°06′W.
G.M.T. of Local Mean Noon	12h. 8m.

Heights of instruments	above M.S.L.	above ground
	m.	m.
Barometer	26·0	..
Thermometer bulbs, north-wall screen	..	12·5
Rain-gauge site	24·1	..
Dines tilting siphon rain-gauge rim	..	0·5
Sunshine recorder	..	20·7
Pressure-tube anemograph	37	13
Robinson cup anemograph	36	23

INTRODUCTION

A description of the site and instruments is given in the *Observatories' Year Book* for 1938, and no noteworthy changes have occurred. The Observatory closed at the end of the year.

Review of the meteorological results

The mean temperature for the year was 281·3°A., 0·2°A. higher than the normal. The extremes recorded in the north-wall screen were 298·3°A. on July 13 and 262·6°A. on March 8. The lowest reading of the grass minimum thermometer was 260·9°A. on March 8.

The total rainfall for the year was 664 mm., 84 mm. below the normal. The sunshine total, 1360 hr. was a little above the normal.

The highest wind speed recorded in a gust was 26 m./sec. on January 13. The results of the harmonic analysis of the diurnal inequalities of pressure are set out in the accompanying table. Average values of the various coefficients for the period 1871–1926 computed by Dr. A. Crichton Mitchell* are given for comparison. Dr. Mitchell gave the phase angles in local apparent time and in volumes of the *Observatories' Year Book* earlier than 1935 they were so quoted; the angles have now been converted to local mean time.

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* MITCHELL, A.C.: Diurnal variation of pressure and temperature at Aberdeen 1871-1926. *Quart J.R. met. Soc., London*, **55**, 1929, p. 197.

TABLE 66 - HARMONIC COMPONENTS OF THE DIURNAL INEQUALITY OF ATMOSPHERIC PRESSURE

Values of c_n, α_n in the series $\sum c_n \sin(15nt + \alpha_n)$, t being local time reckoned in hours from midnight

	c_1		α_1		c_2		α_2		c_3		α_3		c_4		α_4	
	1947	1871-1926	1947	1871-1926	1947	1871-1926	1947	1871-1926	1947	1871-1926	1947	1871-1926	1947	1871-1926	1947	1871-1926
	mb.	mb.	°	°	mb.	mb.	°	°	mb.	mb.	°	°	mb.	mb.	°	°
January	0.42	0.09	274	169	0.14	0.23	142	146	0.11	0.13	355	348	0.06	0.05	222	211
February	0.19	0.16	204	173	0.21	0.27	137	143	0.09	0.10	335	346	0.01	0.03	98	84
March	0.09	0.16	285	156	0.31	0.29	139	147	0.04	0.05	311	330	0.04	0.03	31	27
April	0.52	0.15	343	155	0.41	0.28	150	151	0.03	0.02	129	188	0.04	0.04	302	359
May	0.05	0.10	298	136	0.25	0.24	148	145	0.07	0.06	169	166	0.04	0.02	325	333
June	0.01	0.06	155	104	0.23	0.22	137	141	0.07	0.07	146	155	0.01	0.01	290	331
July	0.13	0.09	192	135	0.20	0.21	135	142	0.08	0.07	158	155	0.02	0.01	13	339
August	0.19	0.11	325	161	0.25	0.23	133	144	0.04	0.04	159	165	0.03	0.03	310	333
September	0.49	0.12	20	147	0.43	0.29	151	151	0.08	0.03	274	346	0.09	0.05	359	345
October	0.27	0.15	163	187	0.33	0.27	151	156	0.07	0.07	349	0	0.02	0.03	356	34
November	0.18	0.13	143	201	0.14	0.23	161	159	0.12	0.10	17	4	0.01	0.01	172	186
December	0.20	0.16	159	169	0.23	0.21	141	147	0.12	0.12	357	357	0.04	0.05	216	205
Arithmetic mean	0.23				0.26				0.08				0.03			
Year	0.05	0.12	300	162	0.26	0.25	144	148	0.02	0.03	357	359	0.02	0.01	322	338
Winter	0.14	0.13	213	178	0.18	0.23	144	149	0.11	0.11	358	353	0.02	0.03	212	194
Equinox	0.18	0.14	360	162	0.37	0.28	148	151	0.03	0.03	310	345	0.04	0.04	353	6
Summer	0.05	0.09	285	139	0.23	0.22	139	143	0.06	0.06	158	159	0.02	0.02	327	334

"Winter" comprises the four months January, February, November, December: "Equinox" the months March, April, September, October: and "Summer" May to August.

PRESSURE AT STATION LEVEL

Maximum, minimum and daily mean values in millibars for each day 0h. to 24h., G.M.T.
The initial 9 or 10 of the values is omitted, i.e. 1005·61 is printed 05·61

67 ABERDEEN: h_b (height of barometer cistern above M.S.L.) = 26·0 m.

	JANUARY			FEBRUARY			MARCH			APRIL			MAY			JUNE		
	Max.	Min.	Mean	Max.	Min.	Mean	Max.	Min.	Mean	Max.	Min.	Mean	Max.	Min.	Mean	Max.	Min.	Mean
									millibars									
1	06·2	95·4	02·2	11·9	09·4	10·9	05·7	03·8	04·5	98·1	95·4	96·8	26·2	18·5	22·6	14·5	09·0	11·6
2	13·2	95·4	07·4	09·4	99·2	03·8	11·7	05·4	08·7	02·4	97·6	99·7	*27·2*	25·2	*26·3*	11·5	09·0	10·0
3	10·7	04·4	06·8	00·3	97·3	98·1	14·5	11·7	13·2	02·5	99·8	01·4	25·2	16·9	20·4	13·7	10·5	12·3
4	15·3	08·0	12·8	10·5	00·3	05·7	14·6	08·0	12·2	10·2	00·4	05·3	17·2	13·5	15·0	10·5	92·7	01·0
5	11·9	05·9	08·8	15·1	10·5	13·0	08·0	01·7	03·8	10·3	81·7	97·8	16·5	12·8	15·2	92·7	85·0	89·4
6	09·4	06·6	08·2	14·9	14·0	14·5	04·2	01·0	02·2	85·9	81·8	84·0	16·7	15·1	15·8	96·7	*83·9*	*88·9*
7	09·2	07·6	08·4	14·5	11·9	13·0	07·1	04·0	05·6	09·7	78·7	95·0	17·4	16·0	16·6	99·1	96·1	97·7
8	09·3	91·0	02·4	11·9	08·7	09·9	12·5	06·3	08·5	16·1	08·1	10·0	16·0	11·0	12·9	00·1	95·6	97·0
9	03·4	89·1	95·2	12·0	08·3	10·2	*18·0*	12·5	*16·3*	28·1	16·1	24·3	15·7	11·8	14·3	*23·1*	00·1	13·6
10	06·9	00·8	04·5	18·2	11·6	15·1	16·1	05·2	09·2	28·0	26·4	27·1	17·8	11·6	14·8	22·8	20·8	21·6
11	00·8	81·6	89·9	20·5	18·1	19·5	16·5	05·2	10·4	27·0	22·0	24·5	17·6	15·2	16·5	22·4	20·8	*21·7*
12	90·1	79·4	86·8	20·3	18·6	19·4	*18·0*	09·7	15·7	*32·2*	21·9	*28·8*	15·7	14·1	14·5	20·8	16·4	18·5
13	87·7	*72·7*	*76·9*	20·0	17·6	18·7	09·7	96·1	00·3	28·9	08·0	19·0	15·6	09·0	12·4	16·4	08·4	12·3
14	91·5	85·0	88·7	25·1	19·8	22·3	14·3	96·7	04·7	13·9	05·7	09·9	09·1	00·4	04·8	08·4	99·5	03·3
15	96·2	82·1	87·8	*29·1*	24·9	27·2	16·6	05·8	13·8	13·8	08·0	10·8	08·6	*00·3*	*04·0*	06·1	97·6	99·7
16	01·6	96·0	99·1	29·0	26·2	*27·9*	05·8	82·6	92·5	14·2	08·3	11·7	13·4	08·6	11·9	13·0	06·1	11·1
17	11·4	96·6	03·9	26·2	20·6	23·2	06·8	85·9	01·0	20·9	14·2	17·9	13·1	06·9	09·8	13·4	09·5	11·9
18	26·1	11·4	19·3	23·0	20·0	21·7	06·3	95·1	00·7	20·5	08·1	15·1	12·2	05·5	07·4	12·5	10·1	10·7
19	28·0	25·2	26·7	22·9	18·3	21·0	95·1	91·2	92·4	08·1	98·6	03·6	21·4	12·2	17·7	10·6	08·6	09·5
20	25·2	22·1	23·1	18·3	09·4	14·0	95·7	92·7	94·7	98·6	85·8	90·9	23·4	21·1	22·1	08·6	05·5	06·9
21	24·2	21·3	22·5	09·4	04·7	06·2	94·7	*73·1*	83·2	88·0	82·4	85·3	23·5	21·1	22·7	13·4	05·9	09·2
22	30·7	24·2	27·1	07·3	04·4	05·9	80·3	75·8	78·6	90·5	81·6	85·0	21·1	17·1	18·9	17·8	13·4	15·9
23	*37·1*	30·7	34·2	10·8	06·8	08·7	79·2	77·0	*77·9*	91·8	*71·5*	*82·4*	17·1	11·9	14·2	17·2	10·9	13·2
24	*37·1*	31·7	*35·1*	11·9	07·5	10·2	96·8	78·4	88·8	11·6	74·6	95·2	11·9	07·4	09·3	11·6	03·9	08·9
25	31·7	23·4	27·7	11·8	09·9	10·6	01·2	96·7	99·6	13·0	88·8	03·7	09·0	07·0	07·9	11·2	02·7	07·0
26	26·6	23·7	25·7	10·1	*93·5*	02·2	99·3	91·6	94·3	14·9	00·3	11·0	08·5	06·0	06·9	12·4	10·0	11·2
27	26·0	23·6	24·7	99·9	93·8	*96·8*	97·8	96·2	97·1	09·8	95·6	99·7	16·0	07·2	11·5	17·8	10·7	13·7
28	23·6	20·0	21·7	06·7	99·9	04·6	97·1	92·7	95·3	04·5	93·5	97·1	18·2	15·9	17·2	20·0	14·9	18·3
29	20·1	14·4	17·9				92·7	88·0	89·8	10·3	04·3	07·4	16·7	14·3	15·4	16·3	09·8	12·2
30	14·4	09·6	11·5				91·8	86·3	88·7	18·5	07·0	12·2	21·4	16·7	19·9	19·9	16·3	18·7
31	10·8	10·0	10·5				95·7	91·3	93·3				20·0	14·1	16·3			
Mean	14·08	06·09	10·25	15·04	10·19	12·65	03·99	95·73	99·89	10·74	98·87	05·08	17·08	12·40	14·68	12·48	06·12	09·24

	JULY			AUGUST			SEPTEMBER			OCTOBER			NOVEMBER			DECEMBER		
	Max.	Min.	Mean	Max.	Min.	Mean	Max.	Min.	Mean	Max.	Min.	Mean	Max.	Min.	Mean	Max.	Min.	Mean
									millibars									
1	19·8	16·5	18·7	21·1	20·1	20·6	20·2	18·6	19·1	22·7	17·1	19·7	06·9	99·9	02·6	93·8	91·2	92·1
2	16·6	08·3	12·1	20·7	17·7	19·5	20·2	16·2	18·5	25·7	22·7	24·5	02·9	*79·4*	91·9	98·3	93·8	96·5
3	08·3	06·4	07·1	17·8	09·8	14·0	16·3	12·8	15·0	25·6	24·3	25·0	92·8	82·7	*88·8*	97·7	93·6	95·4
4	07·7	91·5	02·6	09·8	02·3	05·8	12·9	09·6	11·6	25·2	21·4	24·0	10·3	92·8	01·0	93·6	92·2	93·0
5	96·2	*87·1*	91·8	04·4	*01·4*	*02·4*	11·5	08·8	10·1	21·4	10·6	15·0	*24·9*	10·3	19·1	92·2	87·9	89·5
6	95·9	92·4	94·1	12·3	04·4	08·2	13·0	11·3	12·5	14·6	11·9	13·4	24·7	20·5	*22·5*	02·2	87·6	93·5
7	92·4	88·7	*90·3*	15·1	12·1	14·0	12·5	04·5	08·7	16·5	10·1	14·6	20·5	13·4	16·2	07·7	02·2	06·2
8	94·2	90·9	92·1	14·6	11·8	13·1	04·6	00·2	03·1	10·2	03·4	05·8	13·4	98·9	05·6	22·1	06·9	12·4
9	96·0	93·7	94·9	14·5	11·6	12·7	00·2	*88·7*	*93·0*	1[illegible]·2	05·0	07·4	99·2	94·8	96·9	29·5	22·1	27·3
10	95·5	94·1	94·6	17·6	14·5	16·5	07·1	97·0	03·9	17·5	10·2	13·5	05·5	94·1	00·4	28·1	24·2	25·3
11	05·9	94·5	99·1	20·6	17·4	18·6	04·9	00·9	02·4	18·1	15·7	17·0	04·9	89·8	98·8	24·7	22·4	23·7
12	12·9	05·9	10·6	21·5	18·5	20·1	08·9	03·0	06·4	20·1	15·2	17·3	92·7	84·4	89·0	28·9	22·6	25·3
13	18·5	12·6	15·0	20·7	18·4	19·3	06·7	02·6	04·3	22·4	17·3	20·3	04·0	90·0	97·3	33·8	28·7	31·7
14	20·2	18·3	*19·4*	22·0	20·6	21·3	06·5	94·0	00·3	20·9	07·4	13·6	06·9	99·4	04·2	35·1	33·3	34·2
15	18·3	13·0	15·5	22·6	20·9	21·9	03·5	95·4	01·5	09·3	*02·5*	*04·7*	04·7	95·4	99·2	36·9	34·3	35·4
16	13·1	11·2	11·9	26·4	21·1	23·0	08·7	91·7	00·4	21·7	09·3	17·6	08·3	04·7	07·0	37·2	36·1	*36·5*
17	15·6	13·0	14·7	26·6	24·7	25·8	20·9	08·6	15·1	26·0	17·0	21·8	06·5	04·5	05·7	*37·4*	33·9	36·3
18	16·1	15·2	15·7	24·8	20·1	22·3	23·2	20·6	21·8	25·9	23·3	24·4	05·3	02·7	04·0	33·9	26·6	30·8
19	15·9	11·1	13·0	20·1	18·4	19·3	20·7	09·7	16·2	24·1	22·7	23·3	07·1	04·0	06·0	26·6	21·8	23·2
20	11·3	10·0	10·3	24·3	20·0	22·4	09·7	04·3	06·3	23·0	17·9	21·0	04·0	91·8	96·4	27·9	22·0	25·2
21	10·4	07·2	08·6	24·6	22·3	23·5	*25·4*	05·9	15·8	17·9	12·5	15·2	01·5	97·3	99·4	25·5	13·8	18·9
22	15·0	07·8	11·8	22·4	20·9	21·6	25·0	95·7	10·6	12·5	10·2	10·8	25·3	01·0	02·4	14·6	11·3	13·1
23	15·8	12·1	14·5	24·6	21·0	22·4	14·3	06·4	10·3	17·9	10·5	13·9	07·6	99·8	04·8	13·2	09·8	11·9
24	14·1	11·0	12·3	26·0	24·6	26·4	15·9	14·3	15·0	22·7	17·9	20·8	07·6	03·8	05·7	09·8	91·5	99·7
25	14·8	13·1	13·7	26·9	25·5	26·3	20·0	14·3	17·4	29·8	22·7	25·9	11·4	06·4	09·5	91·9	85·6	88·0
26	17·6	14·0	15·6	*28·1*	26·8	*27·3*	21·0	16·6	19·5	*31·1*	28·4	*30·0*	09·0	02·6	04·7	91·7	84·5	87·6
27	19·7	17·6	18·8	27·5	24·9	26·1	17·4	06·2	10·4	28·4	27·5	27·9	06·4	03·5	05·4	91·2	*64·8*	76·1
28	18·5	07·5	13·4	25·2	23·3	24·4	09·1	07·4	08·2	27·8	23·3	25·6	07·8	04·4	06·0	77·7	69·5	*73·8*
29	17·3	06·0	11·1	23·6	22·0	23·0	21·2	07·4	11·2	23·3	19·0	21·9	06·9	97·9	02·9	89·4	77·5	82·6
30	19·0	17·5	18·1	22·8	21·1	22·0	25·2	21·2	*23·7*	19·0	10·8	14·0	97·9	93·1	95·3	96·8	89·4	93·3
31	*20·7*	16·5	18·0	21·6	19·2	20·6				10·8	06·9	08·6				02·2	96·8	00·6
Mean	11·40	06·60	09·01	20·99	17·98	19·49	14·22	06·46	10·41	20·72	15·31	18·02	06·90	98·78	02·97	12·63	05·74	09·00
									Annual	13·37	06·71	10·06						

PRESSURE AT STATION LEVEL

Monthly and annual means of hourly values in millibars at exact hours, G.M.T.

68 ABERDEEN: h_b = 26 m.

	Hour G.M.T. 0	1	2	3	4	5	6	7	8	9	10	11	Noon	13	14	15	16	17	18	19	20	21	22	23	24	Mean
	millibars																									
Jan.	09·74	*09·70*	09·80	09·86	09·93	09·87	09·94	10·12	10·43	10·74	10·87	*10·90*	10·74	10·60	10·46	10·40	10·39	10·37	10·31	10·25	10·15	10·14	10·09	10·06	10·05	10·25
Feb.	12·80	12·70	12·60	12·49	12·34	*12·29*	12·31	12·41	12·55	12·74	12·91	*12·99*	12·93	12·79	12·66	12·60	12·55	12·61	12·75	12·77	12·77	12·80	12·72	12·63	12·62	12·65
Mar.	00·17	00·07	99·94	99·73	99·65	99·72	99·79	99·86	00·09	00·23	*00·32*	00·31	00·23	00·08	99·86	99·66	99·50	*99·47*	99·60	99·79	99·87	99·89	99·90	99·89	99·85	99·89
Apr.	04·79	04·70	04·69	04·75	04·72	04·83	05·16	05·50	05·64	05·80	*05·91*	05·65	05·37	05·16	04·99	04·63	04·49	*04·40*	04·53	04·68	05·03	05·28	05·43	05·48	05·55	05·08
May	14·81	14·73	14·58	14·49	14·42	14·48	14·64	14·78	*14·93*	14·90	14·93	14·87	14·82	14·76	14·71	14·56	14·44	*14·33*	14·39	14·53	14·68	14·88	14·88	14·81	14·68	14·68
June	09·35	09·20	09·08	08·98	*08·88*	09·00	09·04	09·18	09·32	09·35	09·40	09·37	09·33	09·33	09·30	09·14	09·10	09·05	09·09	09·18	09·24	09·49	*09·61*	09·60	09·53	09·24
July	09·15	09·05	08·84	08·67	*08·62*	08·69	08·83	08·95	08·97	09·04	09·08	09·15	09·15	09·13	09·16	09·08	08·97	08·90	08·92	09·01	09·13	09·28	*09·29*	09·27	09·17	09·01
Aug.	19·62	19·51	19·43	19·35	19·31	19·36	19·47	19·63	19·77	19·82	*19·87*	19·83	19·75	19·64	19·54	19·36	19·22	19·07	*19·05*	19·16	19·39	19·47	19·56	19·59	19·55	19·49
Sept.	10·70	10·69	10·61	10·53	10·45	10·47	10·63	10·76	*10·95*	10·91	10·87	10·77	10·54	10·25	09·96	09·64	*09·37*	*09·37*	09·69	10·14	10·49	10·62	10·66	10·71	10·78	10·41
Oct.	*18·51*	18·34	18·09	17·85	17·67	*17·61*	*17·61*	17·78	17·97	18·15	18·24	18·24	18·08	17·98	17·88	17·74	17·74	17·85	18·06	18·19	18·33	18·33	18·27	18·17	18·04	18·02
Nov.	*03·40*	03·33	03·25	03·05	02·86	02·80	02·80	02·81	02·99	03·05	03·12	03·04	02·87	02·75	*02·67*	02·76	02·85	02·92	03·09	03·10	03·02	03·00	03·00	02·93	02·94	02·97
Dec.	09·08	08·93	08·87	08·82	08·63	*08·46*	08·48	08·56	08·76	09·03	09·21	09·20	09·05	08·96	08·84	08·85	09·00	09·07	09·21	09·28	09·38	09·40	09·41	*09·45*	09·37	09·00
Annual	10·18	10·08	09·98	09·88	09·79	09·80	09·89	10·03	10·20	10·31	*10·39*	10·36	10·24	10·12	10·00	09·87	09·80	*09·78*	09·89	10·01	10·12	10·22	10·24	10·22	10·18	10·06

The initial 9 or 10 of the value is omitted, i.e. 1001·42 is printed 01·42

PRESSURE REDUCED TO MEAN SEA LEVEL

Monthly and annual means of hourly values in millibars at exact hours, G.M.T.

69 ABERDEEN: h_b = 26 m.

	Hour G.M.T. 0	1	2	3	4	5	6	7	8	9	10	11	Noon	13	14	15	16	17	18	19	20	21	22	23	24	Mean
	millibars																									
Jan.	12·99	*12·95*	13·05	13·12	13·18	13·13	13·20	13·38	13·69	14·00	14·13	*14·15*	13·99	13·85	13·71	13·65	13·64	13·62	13·56	13·50	13·40	13·39	13·34	13·31	13·30	13·50
Feb.	16·10	16·00	15·90	15·79	15·64	*15·59*	15·62	15·71	15·85	16·05	16·21	*16·29*	16·23	16·08	15·95	15·89	15·84	15·91	16·05	16·07	16·07	16·10	16·02	15·93	15·92	15·95
Mar.	03·43	03·33	03·20	02·99	02·91	02·98	03·06	03·12	03·35	03·48	*03·57*	03·55	03·46	03·31	03·09	02·89	02·73	*02·70*	02·84	03·03	03·11	03·14	03·15	03·14	03·11	03·14
Apr.	08·01	07·91	07·90	07·97	07·94	08·05	08·38	08·71	08·84	09·00	*09·10*	08·83	08·55	08·34	08·16	07·80	07·67	*07·58*	07·71	07·87	08·23	08·48	08·63	08·69	08·77	08·28
May	18·02	17·95	17·79	17·70	17·64	17·70	17·85	17·99	*18·13*	18·09	18·12	18·06	18·00	17·95	17·90	17·75	17·63	*17·52*	17·58	17·72	17·88	18·09	18·09	18·02	17·89	17·88
June	12·51	12·36	12·25	12·15	*12·05*	12·16	12·20	12·33	12·47	12·49	12·54	12·51	12·46	12·46	12·43	12·27	12·23	12·18	12·22	12·32	12·39	12·64	*12·77*	12·76	12·69	12·39
July	12·29	12·18	11·98	11·82	*11·76*	11·83	11·96	12·07	12·09	12·15	12·19	12·25	12·25	12·23	12·26	12·18	12·07	12·00	12·03	12·13	12·25	12·41	*12·42*	12·40	12·31	12·13
Aug.	22·78	22·68	22·59	22·52	22·48	22·53	22·63	22·78	22·92	22·95	*23·00*	22·96	22·88	22·76	22·66	22·48	22·34	22·20	*22·18*	22·30	22·53	22·62	22·71	22·75	22·71	22·63
Sept.	13·87	13·86	13·78	13·70	13·62	13·65	13·81	13·93	*14·11*	14·06	14·01	13·90	13·67	13·38	13·09	12·76	*12·49*	12·50	12·83	13·28	13·65	13·77	13·82	13·87	13·95	13·56
Oct.	*21·71*	21·54	21·30	21·06	20·88	*20·82*	*20·82*	20·99	21·18	21·35	21·43	21·43	21·26	21·16	21·06	20·91	20·92	21·03	21·26	21·38	21·53	21·54	21·48	21·38	21·24	21·22
Nov.	*06·61*	06·54	06·46	06·27	06·07	06·01	06·01	06·02	06·20	06·26	06·32	06·23	06·06	05·94	*05·86*	05·95	06·04	06·12	06·29	06·30	06·23	06·21	06·21	06·13	06·15	06·17
Dec.	12·31	12·16	12·11	12·05	11·86	*11·69*	11·72	11·79	12·00	12·27	12·44	12·43	12·27	12·19	12·06	12·08	12·23	12·30	12·44	12·51	12·61	12·63	12·64	*12·68*	12·60	12·23
Annual	13·39	13·29	13·19	13·10	13·00	13·01	13·10	13·23	13·40	13·51	*13·59*	13·55	13·42	13·30	13·18	13·05	12·98	*12·97*	13·08	13·20	13·32	13·42	13·44	13·42	13·39	13·26

The initial 9 or 10 of the value is omitted, i.e. 1001·42 is printed 01·42

The monthly and annual values of pressure reduced to mean sea level are computed from the corresponding monthly and annual means of pressure at station level and of temperature. See General Introduction to the Meteorological Tables, 1938.

TEMPERATURE

Monthly and annual means of readings in degrees Absolute at exact hours, G.M.T.

70 ABERDEEN: North-wall screen on tower: h_t = 12·5 m.

	Hour G.M.T. 0	1	2	3	4	5	6	7	8	9	10	11	Noon	13	14	15	16	17	18	19	20	21	22	23	24	Mean
	millibars																									
Jan.	76·85	76·74	76·63	76·49	76·33	76·16	75·97	*75·96*	75·98	76·08	76·23	76·65	76·85	77·11	*77·28*	77·23	77·01	76·84	76·85	76·83	76·90	77·01	76·96	76·91	76·86	76·66
Feb.	73·34	73·23	73·05	72·96	*72·85*	72·87	72·87	73·02	73·17	73·34	73·53	73·85	73·98	74·14	*74·17*	74·09	74·01	73·84	73·64	73·40	73·31	73·27	73·21	73·20	73·16	73·43
Mar.	73·38	73·25	73·17	73·15	73·20	73·07	72·89	*72·77*	73·07	73·68	74·37	74·95	75·57	75·73	75·85	*75·93*	75·82	75·65	75·16	74·74	74·37	74·27	73·98	73·84	73·57	74·25
Apr.	78·52	78·39	78·34	78·17	78·08	*78·04*	78·46	79·03	79·76	80·45	80·80	81·32	81·84	82·12	82·18	*82·28*	81·97	81·75	81·38	80·82	80·14	79·67	79·24	78·90	78·60	80·07
May	81·28	81·14	81·04	80·90	*80·73*	80·91	81·53	82·10	82·52	83·00	83·35	83·66	83·80	83·74	83·66	*83·84*	83·62	83·39	83·25	82·88	82·31	82·00	81·67	81·48	81·45	82·41
June	84·15	83·91	83·72	*83·63*	83·68	84·11	84·71	85·42	85·67	86·07	86·22	86·54	86·82	87·07	87·03	*87·14*	87·06	86·89	86·60	86·23	85·79	85·25	84·82	84·47	84·26	85·54
July	86·58	86·29	86·00	85·84	*85·71*	86·17	86·98	87·66	88·26	88·80	89·08	89·54	89·88	89·92	*89·94*	89·73	89·64	89·60	89·27	88·77	88·21	87·58	87·21	86·89	86·51	88·06
Aug.	87·42	87·03	86·80	86·64	86·50	*86·38*	86·83	87·81	88·79	89·60	90·20	90·51	90·90	*91·06*	90·85	90·88	90·70	90·55	89·93	89·30	88·82	88·54	88·16	87·75	87·41	88·83
Sept.	84·19	83·94	83·69	83·51	83·35	*83·11*	83·15	83·64	84·55	85·83	86·91	87·47	87·80	*87·84*	87·76	87·83	87·48	87·08	86·44	85·86	85·46	85·08	84·71	84·46	84·10	85·46
Oct.	82·63	82·59	82·48	82·55	82·41	82·39	*82·30*	82·45	82·87	83·48	84·23	84·68	85·04	85·09	*85·16*	85·07	84·85	84·49	84·01	83·64	83·35	83·13	82·98	82·69	82·62	83·52
Nov.	78·55	78·33	78·16	*78·11*	78·22	78·30	78·32	78·22	78·24	78·64	79·24	79·60	79·91	79·87	79·91	*79·92*	79·54	79·27	79·01	78·84	78·74	78·62	78·56	78·44	78·24	78·85
Dec.	78·05	77·89	77·74	77·82	77·82	77·68	*77·63*	77·74	77·74	77·82	78·07	78·44	78·67	78·94	*78·95*	78·70	78·47	78·38	78·46	78·35	78·39	78·33	78·23	78·09	78·05	78·18
Annual	80·41	80·23	80·07	79·98	*79·91*	79·93	80·14	80·49	80·89	81·40	81·85	82·27	82·59	82·72	*82·73*	82·72	82·51	82·31	82·00	81·64	81·32	81·06	80·81	80·59	80·40	81·27

The initial 2 or 3 of the readings is omitted, i.e. 275·00 degrees Absolute is printed 75·00

Add 0·16° to obtain temperature in degrees Kelvin where $T(°K.) = t(°C.) + 273·16$

Maximum, minimum and daily mean values in degrees Absolute for each day 0h. to 24h., G.M.T.
The initial 2 or 3 of the values is omitted, i.e. 275·0° is printed 75·0°. Add 0·16° to obtain temperature in degrees Kelvin where $T(°K.) = t(°C.) + 273·16$

71 ABERDEEN: North-wall screen on tower: h_t (height of thermometer bulb above ground) = 12·5 m.

	JANUARY			FEBRUARY			MARCH			APRIL			MAY			JUNE		
	Max.	Min.	Mean	Max.	Min.	Mean	Max.	Min.	Mean	Max.	Min.	Mean	Max.	Min.	Mean	Max.	Min.	Mean
									degrees Absolute									
1	79·8	72·7	76·4	75·5	74·6	75·0	73·3	69·8	71·1	78·6	74·2	76·4	80·7	*76·3*	78·9	92·2	83·1	86·3
2	79·6	73·6	76·6	75·3	73·9	74·6	74·0	69·6	71·9	79·2	73·6	76·1	80·5	77·9	79·0	90·4	84·1	87·3
3	80·7	76·4	79·5	75·3	73·8	74·6	75·1	67·3	71·2	79·4	*72·8*	76·4	79·8	77·3	78·5	84·9	82·9	83·6
4	80·7	78·4	79·3	75·3	73·2	74·7	74·6	65·7	70·2	78·6	72·9	*75·8*	79·4	77·2	*78·1*	86·0	82·8	84·3
5	79·1	77·5	78·3	74·9	72·1	73·7	74·1	67·2	70·6	80·0	73·0	76·6	79·2	77·9	78·5	88·2	83·0	85·5
6	78·2	75·9	76·8	74·1	71·9	73·5	75·0	63·0	69·6	84·0	78·3	80·4	81·9	78·7	80·1	86·2	81·9	83·6
7	76·9	75·7	76·1	73·7	71·7	72·9	75·1	63·6	70·4	80·9	74·6	79·3	82·5	79·3	80·5	88·6	81·0	83·8
8	77·8	75·0	75·6	74·4	72·3	73·5	73·9	*62·6*	*68·3*	78·8	73·8	76·9	83·2	78·3	81·2	88·2	82·0	85·0
9	78·5	76·3	77·5	75·0	73·5	74·6	75·0	57·5	70·9	81·7	74·4	78·6	87·9	80·7	83·5	86·2	82·3	84·3
10	79·7	75·9	77·9	74·2	72·8	73·7	75·0	66·7	73·4	85·5	78·0	81·6	83·9	81·0	82·4	86·2	81·6	83·7
11	79·1	77·5	78·6	74·2	71·9	73·7	75·3	68·8	74·0	86·4	79·8	82·7	83·0	78·7	81·5	83·1	81·3	82·0
12	78·5	74·2	75·9	73·4	71·2	72·8	75·7	68·4	72·5	84·6	78·9	81·5	88·7	79·7	84·1	83·5	79·1	82·1
13	78·1	74·6	76·1	74·3	72·2	73·5	75·1	72·7	74·1	83·4	78·6	81·1	84·2	80·8	82·4	85·0	*77·4*	*81·8*
14	83·0	73·7	77·5	74·4	73·8	74·0	75·0	70·6	72·6	86·2	80·0	82·7	83·3	80·0	81·4	84·9	80·1	82·7
15	85·0	80·2	*82·8*	74·3	73·7	74·0	75·3	67·9	72·4	*91·2*	79·0	*84·9*	88·5	80·8	84·6	85·7	81·7	83·3
16	81·0	78·0	79·6	74·9	73·6	74·2	76·4	73·9	75·4	87·8	78·9	83·8	87·4	79·1	84·2	86·6	80·2	84·1
17	79·5	75·8	77·7	74·7	68·5	72·4	77·3	75·0	76·2	85·2	77·3	80·9	87·6	80·8	84·8	91·0	84·1	86·9
18	80·6	75·3	78·0	*75·9*	74·4	*75·0*	76·7	73·7	75·3	81·1	74·9	78·5	87·5	81·9	83·7	90·1	84·2	86·6
19	78·2	72·7	75·7	75·2	71·1	74·1	76·1	73·8	75·5	86·9	78·8	82·1	85·9	79·9	82·9	92·8	83·7	88·6
20	77·6	74·6	76·2	75·2	69·0	72·3	76·6	74·6	75·7	83·4	80·2	81·0	86·1	78·5	82·7	88·2	84·2	86·1
21	*85·8*	73·0	74·4	74·7	72·0	73·9	79·6	75·7	76·7	83·5	78·9	80·9	84·9	80·9	82·5	89·5	84·3	87·0
22	77·6	71·7	75·4	74·0	68·4	72·2	79·4	76·2	78·1	85·3	78·5	81·2	85·8	80·8	82·1	89·5	82·1	86·2
23	76·4	73·6	74·9	75·6	68·4	72·3	78·9	76·1	77·4	80·9	77·8	79·5	83·9	80·4	81·9	86·8	80·9	84·7
24	76·3	*71·6*	74·0	74·3	70·1	72·5	78·0	74·0	75·8	84·9	77·9	81·0	84·7	79·9	82·6	88·0	84·0	86·0
25	78·3	75·9	76·9	74·0	68·0	*70·9*	*81·2*	73·7	77·6	82·9	77·0	79·3	82·7	81·0	81·8	89·6	84·4	86·5
26	78·2	75·2	76·4	74·7	*65·6*	71·5	80·3	77·7	*78·6*	85·5	77·7	81·8	88·2	80·7	83·8	90·2	84·8	87·2
27	76·3	74·2	75·3	75·2	72·9	74·0	79·8	77·1	78·0	86·0	78·2	81·7	*91·7*	81·8	*86·6*	*96·2*	86·1	*90·6*
28	76·1	73·3	74·4	74·9	69·6	72·4	77·4	76·6	77·0	84·9	77·2	80·5	90·2	82·7	86·5	91·1	85·9	88·2
29	75·3	73·8	74·7				78·0	76·5	77·2	82·4	78·1	79·9	89·1	82·7	86·3	*96·2*	84·7	89·5
30	75·2	*71·6*	*73·4*				78·2	76·3	77·2	81·1	77·0	79·2	86·9	82·6	84·5	91·5	86·8	89·0
31	75·8	*71·6*	74·5				78·7	75·8	77·0				84·9	82·4	83·4			
Mean	78·8	74·8	76·7	74·7	71·6	73·4	76·6	71·6	74·2	83·3	77·0	80·1	85·0	80·0	82·4	88·6	82·8	85·5

	JULY			AUGUST			SEPTEMBER			OCTOBER			NOVEMBER			DECEMBER		
	Max.	Min.	Mean	Max.	Min.	Mean	Max.	Min.	Mean	Max.	Min.	Mean	Max.	Min.	Mean	Max.	Min.	Mean
									degrees Absolute									
1	89·6	85·8	87·5	91·0	83·8	88·1	91·5	82·4	86·9	87·6	81·5	83·7	86·9	81·0	83·7	72·9	67·4	70·5
2	91·9	85·2	88·9	91·9	87·6	89·7	91·2	79·8	86·9	85·0	82·2	83·9	85·9	82·5	84·6	73·2	66·1	68·8
3	93·8	86·6	89·9	92·8	87·5	89·2	89·1	84·6	87·2	*91·3*	81·4	86·3	84·1	80·5	82·0	70·2	*66·0*	*68·3*
4	90·0	83·3	87·0	89·7	86·0	88·1	90·2	84·9	86·8	86·7	78·5	83·1	85·1	79·9	82·3	78·0	68·9	75·8
5	87·8	83·1	85·3	90·5	85·9	88·4	91·3	84·2	88·0	90·6	77·0	84·2	83·6	80·7	81·9	80·6	73·0	78·7
6	89·3	83·2	86·6	90·6	86·2	88·0	90·8	81·9	86·6	86·9	81·2	84·5	83·2	79·0	81·8	81·4	79·7	80·8
7	88·7	82·1	85·2	90·0	85·7	87·4	*92·4*	84·4	87·8	84·5	78·7	82·5	84·4	80·9	83·2	81·0	79·0	80·3
8	87·1	*81·6*	85·1	91·8	84·4	88·4	89·4	84·0	86·3	88·1	83·1	85·6	86·8	82·0	85·2	79·3	76·7	78·4
9	87·9	82·2	*85·1*	90·7	85·2	88·4	91·5	83·0	86·0	88·0	82·1	85·6	86·4	80·5	83·4	78·4	74·8	76·5
10	88·2	83·0	85·5	91·8	85·0	88·5	91·9	84·2	87·6	88·5	82·2	85·0	83·7	79·4	81·2	80·5	76·3	78·6
11	87·5	82·9	85·6	92·9	85·3	88·2	91·2	85·4	88·6	88·6	84·2	86·7	82·6	79·0	81·0	83·2	77·2	80·0
12	93·1	83·0	88·3	94·1	86·0	89·9	89·3	83·9	86·4	90·0	82·6	*87·7*	81·1	76·3	79·3	*86·1*	82·4	*84·2*
13	*98·3*	85·1	92·2	*96·2*	85·5	*91·9*	90·5	82·5	86·4	86·7	78·2	82·9	80·0	75·7	77·9	83·1	78·9	80·7
14	97·2	88·1	*92·8*	93·8	86·0	89·9	88·3	81·9	85·3	85·3	77·5	81·9	77·1	73·7	75·9	81·4	78·8	79·8
15	92·7	85·9	89·5	91·0	88·3	89·3	91·1	86·2	*88·6*	88·4	80·8	84·6	77·4	72·7	74·9	81·2	79·8	80·7
16	90·3	86·9	88·1	92·6	85·7	89·2	89·2	80·8	86·1	81·9	*76·4*	79·6	74·9	72·0	72·9	80·8	79·1	79·9
17	89·9	87·5	88·3	90·6	86·7	88·8	89·2	80·1	84·1	81·0	76·6	*78·7*	74·2	70·5	72·5	81·3	79·7	80·4
18	91·8	86·4	89·0	91·4	87·8	89·4	86·1	78·0	82·8	82·9	77·3	80·4	73·1	69·6	*71·4*	81·2	79·8	80·5
19	90·3	85·0	88·0	92·9	87·0	89·8	86·0	79·5	83·9	86·0	82·6	84·5	76·0	*66·3*	71·5	84·2	81·1	83·1
20	91·0	84·9	88·5	93·5	87·1	90·3	89·1	85·6	87·0	85·2	81·1	83·6	*87·9*	75·9	81·5	84·1	80·2	81·8
21	90·0	87·0	88·1	91·3	83·9	88·4	88·9	81·7	86·0	84·4	79·0	82·3	87·8	83·4	*86·0*	84·1	81·0	83·2
22	92·6	86·0	89·3	91·2	85·7	89·4	87·7	81·6	84·3	85·0	82·7	84·2	86·2	81·4	84·3	84·0	78·7	81·7
23	91·8	86·0	88·6	93·6	84·9	89·0	84·2	80·7	82·2	86·9	84·3	85·1	81·6	75·2	78·8	83·5	80·5	82·5
24	94·0	86·0	89·9	92·7	83·3	87·7	87·8	79·7	83·9	84·4	83·0	83·6	78·6	75·9	77·3	83·2	80·5	81·9
25	93·0	84·0	88·3	91·9	85·9	88·5	87·0	83·1	85·0	84·4	83·0	83·7	76·8	73·0	75·2	82·1	76·6	78·3
26	89·3	85·8	87·2	91·9	84·0	88·6	87·9	79·3	83·8	83·5	81·6	82·7	76·9	73·0	75·2	79·0	74·5	77·0
27	91·8	86·1	88·9	92·8	86·1	89·7	89·3	82·4	85·4	84·0	82·4	83·2	77·1	74·0	75·4	79·3	73·3	76·8
28	89·4	87·2	88·4	93·0	84·6	88·8	85·5	77·8	82·4	83·0	80·1	81·7	78·5	73·9	76·3	77·6	74·4	76·5
29	91·2	*86·7*	88·5	89·7	82·9	87·0	84·0	77·6	*80·3*	83·6	79·8	82·3	77·1	73·9	75·4	74·6	72·7	73·6
30	91·3	86·4	88·5	90·8	85·1	89·0	83·7	*76·8*	80·9	83·4	81·5	82·7	74·7	72·4	73·5	75·0	68·0	71·3
31	91·1	85·0	87·9	91·1	*80·9*	*86·9*				83·7	81·7	82·7				74·6	70·9	73·2
Mean	91·0	85·1	88·1	91·9	85·5	88·8	88·8	81·9	85·5	85·8	80·8	83·5	81·0	76·5	78·9	80·0	76·0	78·2
									Annual	83·8	78·7	81·3						

MEAN RELATIVE HUMIDITY AND VAPOUR PRESSURE FOR EACH DAY

Mean percentages from readings at exact hours 0h. to 24h., G.M.T.; vapour pressure from daily mean temperature and relative humidity

72 ABERDEEN: North-wall screen on tower: h_t = 12·5 m.

	JANUARY		FEBRUARY		MARCH		APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER		OCTOBER		NOVEMBER		DECEMBER	
	Rel. hum.	Vap. press.	Rel. hum.	Vap. press.	Rel. hum.	Vap. press.	Rel. hum.	Vap. press.	Rel. hum.	Vap. press.	Rel. hum.	Vap. press.	Rel. hum.	Vap. press.	Rel. hum.	Vap. press.	Rel. hum.	Vap. press.	Rel. hum.	Vap. press.	Rel. hum.	Vap. press.	Rel. hum.	Vap. press.
	%	mb.	%	mb.	%	mb.	%	mb.	%	mb.	%	mb.	%	mb.	%	mb.	%	mb.	%	mb.	%	mb.	%	mb.
1	83·9	6·5	67·0	4·7	86·5	4·5	73·9	5·8	79·3	7·4	89·6	13·7	87·9	14·5	79·9	13·7	84·7	13·5	91·0	11·7	80·7	10·4	77·1	3·8
2	81·1	6·4	74·6	5·1	76·4	4·3	80·2	6·1	81·3	7·6	90·1	14·7	81·1	14·7	81·5	15·5	80·6	12·8	*93·4*	12·2	89·6	12·2	81·4	3·5
3	82·2	8·0	68·6	4·7	71·2	3·8	72·3	5·6	76·1	*6·9*	*93·7*	12·0	73·1	14·1	84·1	15·5	75·0	12·1	75·7	11·6	73·1	8·4	84·1	*3·5*
4	86·2	8·2	70·0	4·8	74·6	3·6	65·7	*4·9*	81·6	7·2	89·9	12·0	71·9	11·5	88·2	15·1	82·4	13·0	84·8	10·5	*63·3*	7·4	*65·1*	4·9
5	69·3	6·2	73·6	4·7	69·0	4·0	81·0	6·4	92·5	8·4	89·4	13·0	72·7	10·4	85·7	15·0	72·0	12·3	77·0	10·2	74·5	8·5	78·1	7·2
6	63·2	5·1	63·9	4·1	77·5	3·6	65·8	6·8	88·7	8·9	81·7	10·4	*56·9*	*8·9*	80·1	13·7	72·8	11·3	66·5	9·0	87·6	9·9	88·0	9·3
7	62·0	4·7	67·6	4·1	82·4	4·1	74·6	7·1	93·9	9·7	71·7	9·3	69·0	9·8	73·2	*12·0*	77·7	13·1	80·6	9·6	91·9	11·4	87·9	9·0
8	76·8	5·7	59·0	3·7	79·0	*3·3*	78·0	6·3	87·7	9·5	66·6	9·3	78·0	11·0	74·1	13·0	63·1	9·6	85·9	12·5	91·3	13·0	95·1	8·5
9	87·9	7·4	65·6	4·5	74·7	3·8	67·4	6·1	79·1	10·0	*63·4*	8·5	78·3	11·1	72·3	12·6	78·0	11·7	83·5	12·2	72·0	9·1	90·5	7·1
10	85·0	7·4	81·3	5·2	79·0	5·0	81·2	9·1	83·9	9·9	80·8	10·4	80·4	11·7	86·7	15·3	68·0	11·3	73·9	10·4	68·5	7·5	85·8	7·8
11	91·7	8·3	62·9	4·0	*62·4*	4·1	73·7	8·9	86·8	9·6	93·5	10·7	88·3	12·9	85·8	14·8	85·2	15·1	86·6	13·6	75·7	8·1	92·5	9·3
12	83·8	6·3	69·3	4·2	76·7	4·5	67·4	7·5	87·1	11·5	74·6	8·6	72·7	12·6	74·1	14·2	76·3	11·7	85·1	*14·2*	85·6	8·2	83·2	*11·1*
13	*92·5*	7·1	61·5	3·9	71·0	4·7	74·1	8·0	95·4	11·2	72·0	*8·2*	66·7	14·8	*61·6*	13·5	65·6	10·1	77·2	9·4	79·7	6·9	*96·5*	10·1
14	85·9	7·2	57·0	3·7	77·0	4·6	63·3	7·6	95·8	10·6	80·5	9·7	71·1	*16·4*	83·4	16·1	81·8	11·7	73·4	8·4	78·8	5·9	92·1	9·1
15	74·7	*9·1*	56·9	3·7	67·0	3·9	72·1	*10·0*	70·4	9·6	77·9	9·8	80·9	15·2	84·0	15·6	81·5	14·4	77·0	10·5	81·4	5·7	80·5	8·5
16	81·9	8·0	54·4	3·6	91·9	6·7	70·7	9·2	*68·1*	9·0	71·5	9·4	93·3	16·0	85·0	15·7	86·8	13·1	71·2	6·9	73·8	4·5	89·1	8·9
17	73·0	6·2	63·7	3·7	86·6	6·7	*56·6*	6·0	69·5	9·6	83·7	13·3	91·9	16·0	*93·5*	16·8	69·7	9·2	72·4	*6·6*	70·5	4·1	84·2	8·7
18	76·1	6·6	*51·5*	3·6	84·3	6·1	79·9	7·2	86·5	11·1	87·6	13·6	85·6	15·6	88·1	16·4	85·7	10·4	82·7	8·5	66·9	*3·6*	81·6	8·5
19	90·3	6·7	57·5	3·8	92·7	6·8	70·9	8·2	82·0	10·0	73·2	13·0	88·0	15·0	85·1	16·3	96·8	12·6	84·2	11·4	79·7	4·4	73·4	9·1
20	89·6	6·9	65·3	3·8	90·7	6·7	*84·8*	9·1	78·5	9·5	83·1	12·5	90·8	16·0	87·6	*17·3*	*97·6*	*15·6*	86·5	11·1	*92·4*	10·3	71·9	8·1
21	80·8	5·5	61·9	4·0	91·2	7·3	77·8	8·3	85·8	10·2	78·8	12·6	*93·9*	16·1	86·3	15·1	68·8	10·3	82·8	9·7	88·9	*13·3*	66·1	8·2
22	79·4	5·8	66·8	3·8	88·3	7·8	70·5	7·7	88·7	10·2	70·7	10·7	74·9	13·9	86·3	16·1	74·0	9·9	85·3	11·3	87·3	11·7	82·9	9·3
23	72·7	5·1	61·0	*3·5*	96·1	8·0	81·0	7·8	87·9	10·0	84·0	11·5	73·9	13·1	90·0	16·4	67·5	7·9	95·4	13·5	83·0	7·7	71·1	8·4
24	85·5	5·6	71·0	4·2	69·9	5·2	62·4	6·7	86·7	10·4	84·4	12·6	65·9	12·7	87·1	14·6	75·4	9·8	77·3	9·9	70·9	5·9	89·3	10·2
25	85·0	6·9	73·2	3·8	68·6	5·8	77·3	7·4	97·1	11·0	79·8	12·4	70·3	12·2	80·4	14·2	87·8	12·3	67·6	8·7	81·2	5·9	66·0	5·9
26	*61·4*	4·8	88·4	4·8	89·0	8·1	57·3	6·5	90·3	11·7	78·5	12·7	84·1	13·6	78·7	14·0	85·3	11·0	*63·5*	7·6	88·8	6·4	66·5	5·4
27	83·8	6·0	*89·9*	*5·9*	95·6	*8·3*	63·9	7·2	73·2	11·4	77·8	*15·7*	79·2	14·3	80·1	15·2	80·5	11·6	73·4	9·1	77·2	5·6	77·9	6·2
28	84·7	5·7	76·6	4·5	98·3	8·0	64·9	6·7	73·7	11·4	85·5	14·8	92·7	16·2	80·6	14·5	*60·2*	7·1	78·6	8·8	86·4	6·7	73·5	5·8
29	71·6	4·9			*99·2*	8·2	79·7	7·9	77·6	11·8	78·6	14·7	80·1	14·1	91·6	14·6	66·9	*6·8*	76·5	9·0	82·5	6·0	89·7	5·7
30	74·4	*4·7*			90·9	7·5	76·6	7·3	91·5	*12·4*	73·3	13·3	79·6	14·0	79·7	14·5	66·4	7·1	75·3	9·1	91·3	5·8	84·1	4·5
31	69·0	4·7			86·5	7·0			*98·0*	12·4			84·4	14·3	82·6	13·1			86·2	10·4			76·2	4·7
Mean*	79·5	6·4	67·1	4·2	82·4	5·7	72·2	7·3	84·4	10·0	80·2	11·8	79·3	13·6	82·5	14·9	77·1	11·3	79·7	10·2	80·5	7·8	81·3	7·4

* Mean of the column

RELATIVE HUMIDITY

Monthly and annual means of values at exact hours, G.M.T.

73 ABERDEEN: h_t = 12·5 m.

	Hour G.M.T. 0	1	2	3	4	5	6	7	8	9	10	11	Noon	13	14	15	16	17	18	19	20	21	22	23	24	Mean*
	per cent.																									
Jan.	80·4	*81·2*	81·0	79·7	79·8	79·9	79·8	80·1	79·7	80·2	80·7	79·5	79·0	78·1	76·6	*75·9*	78·8	79·9	80·6	80·5	79·8	78·1	79·4	79·9	79·8	79·5
Feb.	*65·1*	67·8	66·4	68·0	68·4	66·5	66·2	67·4	67·0	66·8	68·4	67·4	66·9	66·7	66·1	66·6	65·7	67·4	67·9	69·1	*69·4*	66·8	66·7	66·3	65·9	67·1
Mar.	84·7	85·5	*86·3*	84·9	83·9	84·4	84·1	85·6	84·6	82·8	81·1	80·0	78·4	*78·1*	78·9	*78·1*	79·1	79·3	81·9	82·5	83·1	82·3	83·8	83·7	84·8	82·4
Apr.	78·4	78·4	78·3	78·7	79·4	*80·0*	78·9	77·8	74·3	71·4	68·9	65·4	63·3	*62·0*	63·9	63·6	65·9	66·5	67·4	69·7	73·3	74·3	75·3	77·0	78·1	72·2
May	88·1	88·6	88·9	89·5	*89·6*	89·5	88·5	86·1	84·3	81·7	80·1	79·6	*78·1*	79·4	79·6	78·8	79·8	80·9	81·5	83·1	85·2	87·0	87·8	88·4	88·8	84·4
June	86·8	86·7	87·4	87·9	*88·5*	87·4	84·8	81·2	79·5	77·3	77·4	75·8	75·6	*73·0*	74·3	73·4	73·2	73·3	74·6	76·5	79·0	81·9	83·9	85·7	86·5	80·2
July	86·8	87·5	88·4	*89·1*	88·9	86·5	83·0	80·9	77·7	75·8	74·2	72·8	70·5	70·4	*70·2*	71·8	72·8	73·3	74·4	76·5	79·7	82·6	83·6	85·3	86·8	79·3
Aug.	89·5	89·9	*90·1*	89·9	89·6	89·7	88·7	86·0	82·2	79·5	76·5	75·1	72·9	*72·3*	73·4	73·1	75·0	75·8	79·5	82·8	85·1	86·6	87·6	89·0	89·5	82·5
Sept.	82·4	81·6	82·2	83·1	82·5	83·5	*84·1*	82·6	79·2	75·4	68·7	67·7	*66·2*	66·7	69·5	70·0	73·3	74·5	76·7	78·8	79·7	80·5	81·0	81·0	82·1	77·1
Oct.	82·7	83·0	83·1	83·4	83·2	83·2	*85·0*	83·7	82·4	80·7	77·5	74·7	73·2	73·0	72·7	*72·3*	73·7	76·9	79·3	81·9	81·5	81·6	81·1	82·8	82·5	79·7
Nov.	81·5	82·4	82·2	81·7	82·1	81·3	81·3	81·9	*82·9*	81·4	79·8	79·8	78·3	78·4	79·1	*77·8*	77·9	78·3	78·4	80·0	80·8	81·9	81·9	81·0	82·1	80·5
Dec.	80·3	81·2	82·1	81·6	81·5	81·5	81·5	81·5	82·2	81·6	*82·9*	81·1	80·5	*79·9*	80·1	81·4	82·9	82·4	80·9	81·5	80·8	80·6	80·7	81·6	80·1	81·3
Annual	82·2	82·8	83·0	*83·1*	83·1	82·8	82·2	81·2	79·7	77·9	76·4	74·9	73·6	*73·2*	73·7	73·6	74·8	75·7	76·9	78·6	79·8	80·4	81·1	81·8	82·2	78·9

VAPOUR PRESSURE

Monthly and annual means of values at exact hours, G.M.T., computed from corresponding mean values of temperature and relative humidity

74 ABERDEEN: h_t = 12·5 m.

	Hour G.M.T. 0	1	2	3	4	5	6	7	8	9	10	11	Noon	13	14	15	16	17	18	19	20	21	22	23	24	Mean*
	millibars																									
Jan.	6·4	*6·5*	6·4	6·3	6·2	6·1	6·0	6·1	*6·0*	6·1	6·2	6·3	6·4	6·4	6·4	6·3	6·4	6·4	6·5	6·5	6·5	6·4	6·4	6·5	6·4	6·3
Feb.	4·1	4·2	4·1	4·1	4·1	4·0	*4·0*	4·1	4·1	4·2	4·3	4·4	4·4	*4·4*	4·4	4·4	4·3	4·4	4·3	4·3	4·3	4·2	4·1	4·1	4·1	4·2
Mar.	5·4	5·3	5·3	5·2	5·2	5·2	*5·1*	5·1	5·2	5·3	5·5	5·6	5·8	5·8	*5·9*	5·9	5·9	5·9	5·8	5·7	5·6	5·5	5·5	5·4	5·4	5·5
Apr.	7·1	7·0	7·0	*6·9*	7·0	7·0	7·1	7·3	7·3	7·4	7·3	7·2	7·2	7·2	7·4	7·4	*7·5*	7·5	7·4	7·4	7·4	7·3	7·2	7·2	7·1	7·3
May	9·7	9·6	9·6	9·5	*9·4*	9·5	9·8	10·0	10·0	10·0	10·1	10·2	10·1	10·2	10·2	*10·2*	10·2	10·2	10·2	10·1	10·0	10·0	9·9	9·8	9·8	10·0
June	11·5	11·3	11·3	*11·3*	11·4	11·6	11·7	11·7	11·7	11·6	11·8	11·8	*11·9*	11·7	11·9	11·8	11·7	11·6	11·6	11·6	11·7	11·7	11·6	11·6	11·5	11·7
July	13·4	13·4	13·2	13·2	*13·1*	13·1	13·2	13·5	13·5	13·6	13·6	13·7	13·6	13·6	13·5	13·7	13·8	*13·8*	13·8	13·7	13·8	13·7	13·6	13·5	13·4	13·6
Aug.	14·7	14·4	14·2	14·0	13·9	*13·8*	14·0	14·5	14·7	15·0	15·0	15·0	15·0	15·0	15·0	15·0	15·2	15·2	15·3	*15·4*	15·3	15·3	15·1	14·9	14·7	14·8
Sept.	10·8	10·7	10·6	10·6	10·4	*10·3*	10·4	10·6	10·8	11·2	10·9	11·2	11·1	11·3	11·7	11·8	*12·1*	12·0	11·8	11·7	11·5	11·4	11·1	11·0	10·8	11·2
Oct.	9·9	9·9	9·9	9·9	9·8	*9·8*	10·0	9·9	10·0	10·2	10·3	10·3	10·3	10·3	10·3	10·2	10·2	10·4	10·4	*10·5*	10·3	10·1	9·9	10·0	9·9	10·1
Nov.	7·4	7·4	7·3	*7·2*	7·3	7·2	7·3	7·3	7·4	7·4	7·6	7·8	7·8	7·8	*7·9*	7·8	7·6	7·5	7·3	7·4	7·4	7·5	7·4	7·3	7·5	7·5
Dec.	7·0	7·0	7·0	7·0	7·0	7·0	*6·9*	7·0	7·0	7·0	7·3	7·3	7·4	7·4	7·5	7·5	*7·5*	7·4	7·3	7·3	7·2	7·2	7·2	7·2	7·0	7·2
Annual	8·5	8·4	8·4	8·3	8·3	*8·3*	8·3	8·4	8·5	8·6	8·7	8·8	8·8	8·8	8·9	8·9	*8·9*	8·9	8·8	8·8	8·8	8·7	8·6	8·5	8·5	8·6

* Mean of values, 1,2,·····23, ½(0 + 24).

Amount in millimetres, duration in hours and maximum rate of fall for each day 0h. to 24h., G.M.T.

75 ABERDEEN: h_r(height of receiving surface above M.S.L.) = height of station above M.S.L. + height of receiving surface above ground = 24·1 m. + 0·6 m.

	JANUARY			FEBRUARY			MARCH			APRIL			MAY			JUNE		
	Amount	Duration	Max. rate	Amount	Duration	Max. rate	Amount	Duration	Max. rate	Amount	Duration	Max. rate	Amount	Duration	Max. rate	Amount	Duration	Max. rate
	mm.	hr.	mm./hr.	mm.	hr.	mm./hr.	mm.	hr.	mm./hr.	mm.	hr.	mm./hr.	mm.	hr.	mm./hr.	mm.	hr.	mm./hr.
1	3·8	1·8	12	...	...	...	7·4	3·6	(9)	0·2	0·2	2	2·5	2·1	11	...	...	...
2	1·9	2·0	9	0·2	0·9	...	6·8	3·6	(4)	0·8	1·0	3	...	...	...	...	...	...
3	12·4	7·1	14	0·5	0·8	...	...	...	...	...	...	...	11·8	6·7	8	0·7	0·4	10
4	12·8	12·8	10	2·7	3·4	(3)	...	...	...	(...)	...	...	*20·5*	*11·4*	7	8·1	3·2	*40*
5	...	...	...	4·7	2·0	*(9)*	...	...	...	*11·1*	*8·2*	9	3·4	4·9	2	1·5	3·1	3
6	...	...	...	0·5	0·5	(1)	3·8	1·6	(5)	...	...	...	0·7	1·6	3	*8·5*	*5·9*	4
7	...	...	...	1·4	1·2	(5)	1·2	0·7	(3)	2·9	2·0	8	5·0	4·0	5	...	...	...
8	8·8	8·5	6	0·2	0·2	(2)	...	...	...	...	...	...	2·9	1·1	16	...	...	...
9	5·8	3·5	12	0·4	0·5	(2)	...	...	...	...	...	...	...	...	...	0·2	0·2	3
10	...	...	...	7·8	*12·1*	(3)	5·2	6·7	(?)	1·4	3·3	2	...	...	...	0·4	0·6	1
11	*28·2*	*15·0*	*21*	0·1	0·2	(1)	...	...	...	...	...	...	...	...	...	1·4	5·7	1
12	4·8	1·7	14	0·8	0·8	(3)	1·0	0·6	(2)	...	...	...	...	...	...	...	...	...
13	13·2	13·3	15	0·3	0·4	(1)	0·6	0·6	(3)	...	...	...	4·0	5·1	5	0·5	0·2	5
14	0·1	0·7	...	...	...	...	0·7	0·9	(3)	0·2	0·2	10	0·9	0·4	8	...	...	...
15	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·1	0·1	2
16	5·6	6·8	2	...	...	...	7·4	10·0	4	0·5	0·8	...	...	...	...	0·2	0·7	...
17	2·0	2·0	2	...	...	...	0·3	1·2	...	...	...	...	...	...	...	0·8	1·2	2
18	...	...	...	...	...	...	7·1	10·7	(4)	...	...	...	3·5	1·3	*34*	0·7	1·5	2
19	...	...	...	...	...	...	*17·5*	*13·0*	(4)	2·9	4·5	2	...	...	...	...	...	...
20	...	...	...	...	...	...	2·9	6·0	9	1·6	1·5	6	...	...	...	0·1	0·2	1
21	...	...	...	1·3	0·6	(4)	13·7	7·5	17	3·0	3·3	*15*	...	...	...	...	...	...
22	1·1	1·0	4	0·2	0·2	(1)	0·3	0·7	2	0·1	0·1	...	1·1	3·2	2	...	...	...
23	0·6	0·7	2	...	...	...	4·0	5·4	2	8·4	4·2	7	...	...	...	0·6	1·2	1
24	...	...	...	0·3	0·4	(1)	1·7	4·2	2	1·0	3·9	1	...	...	...	1·0	1·8	2
25	0·8	0·9	4	...	...	...	...	...	...	5·4	4·4	4	4·1	5·7	10	...	...	...
26	...	...	...	*10·8*	8·4	(?3)	0·9	2·2	2	...	...	...	0·3	2·1	1	...	...	...
27	2·2	4·6	3	3·1	1·9	(7)	0·5	4·1	...	...	...	...	0·1	0·4	1	1·2	2·6	5
28	7·3	2·8	(8)	1·5	2·4	(1)	6·6	8·8	*23*	1·7	1·3	13	...	...	...	...	...	...
29	1·4	1·0	(4)				2·0	4·3	2	5·2	7·4	7	...	...	...	2·1	0·8	17
30	2·9	2·7	(3)				9·8	12·0	4	2·3	2·5	*15*	9·1	7·3	4	...	...	...
31	...	...	...				0·7	0·9	3				4·8	5·0	23			
Total	115·7	88·9	-	36·8	36·9	-	102·1	109·3	-	48·7	48·8	-	74·7	62·3	-	28·1	29·4	-

	JULY			AUGUST			SEPTEMBER			OCTOBER			NOVEMBER			DECEMBER		
	Amount	Duration	Max. rate	Amount	Duration	Max. rate	Amount	Duration	Max. rate	Amount	Duration	Max. rate	Amount	Duration	Max. rate	Amount	Duration	Max. rate
	mm.	hr.	mm./hr.	mm.	hr.	mm./hr.	mm.	hr.	mm./hr.	mm.	hr.	mm./hr.	mm.	hr.	mm./hr.	mm.	hr.	mm./hr.
1	...	...	...	...	...	...	...	...	...	3·9	*10·7*	3	0·8	1·6	2	0·3	0·3	(1)
2	...	...	...	...	...	...	...	...	...	0·7	1·4	1	7·0	5·4	3	...	...	...
3	1·1	1·2	2	...	...	...	0·2	0·4	...	...	...	...	...	...	...	0·3	0·1	(2)
4	2·2	2·1	6	...	...	...	3·2	4·8	5	...	...	...	...	...	...	...	...	...
5	7·3	*4·7*	27	...	...	...	0·1	0·2	...	...	...	...	...	...	...	3·8	3·6	20
6	...	...	...	...	...	...	0·1	0·1	1	...	...	...	...	...	...	*18·0*	6·1	*78*
7	*10·9*	1·6	*60*	...	...	...	0·4	0·2	8	3·2	3·9	6	0·8	1·2	6	1·5	2·0	5
8	...	...	...	...	...	...	1·8	0·5	26	1·0	2·0	3	1·9	1·6	24	5·1	4·2	50
9	0·2	0·3	2	...	...	...	4·0	4·9	7	...	...	...	...	...	...	...	...	...
10	...	...	...	...	...	...	0·8	1·5	2	0·2	0·1	1	...	...	...	1·3	3·1	1
11	1·4	1·3	5	...	...	...	1·8	1·8	7	...	...	...	2·3	2·8	5	0·2	0·2	2
12	...	...	...	...	...	...	...	...	...	11·3	7·2	17	11·4	*8·4*	11	2·0	3·0	2
13	...	...	...	...	...	...	0·2	0·1	1	3·6	3·6	4	1·9	1·3	5	2·3	5·8	2
14	...	...	...	...	...	...	0·4	0·8	1	...	...	...	1·4	1·7	5	...	...	...
15	...	...	...	...	...	...	...	...	...	1·8	1·1	13	4·9	6·1	19	...	...	...
16	0·2	0·1	2	...	...	...	4·1	3·4	15	0·8	0·8	5	1·8	2·5	(1)	0·5	1·0	1
17	...	...	...	...	...	...	...	...	...	1·2	2·2	18	...	...	...	0·5	1·3	2
18	0·3	1·7	...	...	...	...	...	...	...	0·5	1·0	2	...	...	...	...	...	...
19	...	...	...	...	...	...	*16·1*	*12·4*	23	...	...	...	0·5	0·4	...	...	...	...
20	...	...	...	...	...	...	0·2	0·2	...	...	...	...	3·2	3·4	(1)	...	...	...
21	6·9	2·8	13	...	...	...	2·5	1·6	13	...	...	...	0·3	0·2	5	...	...	...
22	...	...	...	...	...	...	2·6	0·6	*96*	*13·8*	4·7	19	0·1	0·4	...	5·5	*6·7*	1
23	...	...	...	...	...	...	0·7	0·5	3	2·9	0·9	14	*13·3*	4·3	8	...	...	...
24	...	...	...	...	...	...	...	...	...	0·3	0·3	1	1·2	0·8	6	5·3	3·9	7
25	...	...	...	...	...	...	0·7	0·5	30	...	...	...	4·0	3·9	12	...	...	...
26	...	...	...	...	...	...	...	...	...	...	...	...	6·8	6·5	*33*	0·1	0·1	1
27	...	...	...	...	...	...	0·8	0·6	7	0·2	0·2	1	1·3	1·4	8	5·4	4·8	5
28	4·8	0·7	58	...	...	...	...	...	...	1·9	1·6	20	3·4	1·7	13	...	...	...
29	...	...	...	...	...	...	0·5	0·5	15	1·0	1·1	5	0·4	0·3	(1)	5·6	6·0	(1)
30	...	...	...	...	...	...	...	...	...	1·5	1·3	14	2·5	1·7	(2)	...	...	...
31	1·2	1·1	7	...	...	...				1·3	0·9	*25*				...	...	...
Total	36·5	17·6	-	...	...	-	41·2	35·6	-	51·1	45·0	-	71·2	57·6	-	57·7	52·2	-

Monthly and annual totals of amounts in sixty-minute periods between exact hours, G.M.T.

76 ABERDEEN: h_r = 24·1 m. + 0·6 m.

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	0-24
	millimetres																								
Jan.	4·0	7·1	3·2	3·4	2·5	3·0	1·9	3·0	4·0	3·7	6·1	*11·3*	2·9	5·4	4·9	7·3	7·3	5·7	3·8	2·4	3·5	4·2	6·7	8·4	115·7
Feb.	1·7	1·3	1·2	1·4	1·1	1·0	*3·6*	1·3	1·3	1·7	1·3	1·8	1·1	0·6	2·2	0·3	0·8	1·2	1·8	1·8	0·7	2·0	2·6	3·0	36·8
Mar.	4·9	3·6	3·6	5·7	4·6	5·8	4·5	3·1	2·4	1·3	0·9	2·7	3·2	5·3	7·6	*9·5*	7·3	4·8	2·9	2·9	1·2	1·9	4·3	8·1	102·1
Apr.	0·4	1·1	0·5	1·1	1·0	2·2	1·2	0·1	0·2	1·7	2·4	3·1	5·1	*7·8*	6·5	4·4	4·1	0·9	1·3	1·3	1·5	0·1	···	0·7	48·7
May	5·4	6·0	3·9	2·7	1·7	0·5	0·5	0·6	1·7	3·8	2·8	3·5	2·6	1·4	0·6	1·2	1·7	3·1	6·7	3·5	1·9	*7·1*	7·0	4·8	74·7
June	0·1	0·4	0·7	2·2	1·4	2·1	4·1	*5·8*	1·8	1·2	0·4	0·5	1·7	0·2	0·3	0·1	0·4	0·3	1·1	0·6	1·0	0·7	0·9	0·1	28·1
July	1·4	1·7	1·7	0·2	0·1	0·1	···	···	0·6	1·2	0·3	0·3	*5·7*	2·3	5·2	5·1	0·8	4·5	1·4	0·8	1·2	0·3	1·3	0·3	36·5
Aug.	···	···	···	···	···	···	···	···	···	···	···	···	···	···	···	···	···	···	···	···	···	···	···	···	···
Sept.	0·7	···	0·1	2·2	1·3	0·8	0·3	0·2	1·1	0·5	1·1	1·5	4·3	3·5	4·5	3·2	2·8	*6·8*	2·9	1·2	0·2	0·4	0·4	1·2	41·2
Oct.	4·3	3·3	2·5	2·7	0·8	0·8	0·2	0·2	···	0·3	0·9	0·5	0·5	0·1	0·4	0·5	0·8	2·1	3·5	*8·0*	4·6	6·4	5·5	2·2	51·1
Nov.	3·5	4·6	2·6	4·4	5·1	2·0	0·9	1·1	0·9	2·9	*7·2*	5·4	6·0	3·6	1·2	0·7	1·0	1·5	2·5	3·9	2·8	2·4	1·8	3·2	71·2
Dec.	3·3	3·5	3·0	1·8	0·9	0·8	1·3	0·8	2·0	*4·8*	3·5	4·2	2·9	4·2	2·6	4·5	2·2	0·2	1·1	0·6	0·4	3·6	4·4	1·1	57·7
Annual	29·7	32·6	23·0	27·8	20·5	19·1	18·5	16·2	*16·0*	23·1	26·9	34·8	36·0	34·4	36·0	*36·8*	29·2	31·1	29·0	27·0	19·0	29·1	34·9	33·1	663·8

RAINFALL

Monthly and annual totals of durations in sixty-minute periods between exact hours, G.M.T.

77 ABERDEEN: h_r = 24·1 m. + 0·6 m.

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	0-24
	hours																								
Jan.	3·9	5·1	2·1	3·4	3·0	2·9	2·8	3·4	3·7	3·8	4·2	*6·1*	3·8	3·4	2·9	2·8	3·1	5·4	5·0	2·6	3·3	3·5	4·4	4·3	88·9
Feb.	1·7	2·1	1·9	1·8	1·6	1·4	*2·8*	2·2	1·3	2·2	1·8	1·8	1·2	1·0	1·6	0·5	1·1	0·9	1·3	1·3	0·8	1·3	1·6	1·7	36·9
Mar.	6·5	4·7	4·6	4·5	4·3	3·5	4·1	4·1	5·0	3·5	2·0	3·1	4·0	4·2	4·8	6·6	6·7	4·7	3·9	4·5	2·0	4·4	6·2	*7·4*	109·3
Apr.	0·3	2·2	0·7	1·8	1·9	2·5	2·3	0·4	0·2	2·0	1·4	3·2	4·0	5·1	*5·7*	4·5	2·5	2·0	2·2	1·9	1·4	0·2	···	0·4	48·8
May	2·6	2·9	3·2	*4·6*	3·2	1·5	0·9	0·4	1·4	2·6	2·9	2·2	2·6	2·4	1·0	2·4	2·3	3·3	3·9	3·4	2·7	3·9	3·5	2·5	62·3
June	0·2	0·2	0·4	1·0	1·4	1·6	2·6	2·5	2·3	1·3	0·4	1·2	*3·0*	0·8	0·4	0·2	1·1	0·9	1·8	0·8	2·1	1·5	1·3	0·4	29·4
July	1·0	1·3	1·0	0·6	1·0	0·3	···	···	0·7	0·9	0·4	0·3	0·8	0·3	0·8	*1·9*	0·7	1·2	0·6	0·7	1·2	0·6	1·0	0·3	17·6
Aug.	···	···	···	···	···	···	···	···	···	···	···	···	···	···	···	···	···	···	···	···	···	···	···	···	···
Sept.	0·8	···	0·1	1·0	1·3	0·6	1·2	0·6	1·0	0·7	1·0	1·3	2·6	2·2	2·7	3·4	*3·6*	*3·6*	3·1	1·9	0·4	0·5	0·7	1·3	35·6
Oct.	3·8	2·8	2·9	2·2	1·4	1·0	1·0	0·1	···	0·3	1·2	0·8	0·4	0·2	0·8	0·8	1·5	2·7	3·2	*5·3*	4·1	3·1	3·3	2·1	45·0
Nov.	4·0	*4·3*	3·2	3·4	2·2	2·4	1·2	1·2	1·0	2·5	3·9	2·9	3·9	2·8	1·3	0·9	1·1	1·0	2·2	3·2	2·5	1·8	1·6	3·1	57·6
Dec.	2·7	3·0	2·0	1·6	1·3	1·6	1·9	1·2	2·2	*4·4*	3·3	3·7	2·9	3·6	3·2	2·5	2·8	0·2	1·4	0·7	1·2	1·5	2·1	1·2	52·2
Annual	27·5	28·6	22·1	25·9	22·6	19·3	20·8	*16·1*	18·8	24·2	22·5	26·6	*29·2*	26·0	25·2	26·5	26·5	25·9	28·6	26·3	21·7	22·3	25·7	24·7	583·6

NOTES ON RAINFALL

78 ABERDEEN

Dry Periods

The following definitions are adopted by the British Rainfall Organization
An "absolute drought" is a period of at least 15 consecutive days to none of which is credited 0·2 mm. of rain or more
A "partial drought" is a period of at least 29 consecutive days, the mean daily rainfall of which does not exceed 0·2 mm.
A "dry spell" is a period of at least 15 consecutive days to none of which is credited 1·0 mm. of rain or more

"Absolute drought": August 1–September 2
"Partial drought": July 22–September 3; July 29–September 8
"Dry spell": August 1–September 3

Wet Periods

The following definitions are adopted by the British Rainfall Organization
A "rain spell" is a period of at least 15 consecutive days to each of which is credited 0·2 mm. of rain or more
A "wet spell" is a period of at least 15 consecutive days to each of which is credited 1·0 mm. of rain or more

"Rain spell": No occasions
"Wet spell": No occasions

Rainfall Duration

Hours	0·1–1·0	1·1–2·0	2·1–6·0	6·1–12·0	>12·0
Number of days	70	43	58	22	6

Continuous or Heavy Falls

The heaviest falls were 28 mm. in 19 hr. on January 11, and 36 mm. in 41 hr. on May 3–5

Heavy Falls in short periods

On January 11, 10 mm. fell in 1 hr. 30 min. and 15 mm. in 3 hr.

Rate of Rainfall (Jardi recorder)

The highest instantaneous rate of rainfall was 96 mm./hr. on September 22.

79 ABERDEEN: h_s (height of recorder above ground) = 20·7 m.

	JANUARY		FEBRUARY		MARCH		APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER		OCTOBER		NOVEMBER		DECEMBER	
	Duration	Per cent. of possible	Duration	Per cent. of possible	Duration	Per cent. of possible	Duration	Per cent. of possible	Duration	Per cent. of possible	Duration	Per cent. of possible	Duration	Per cent. of possible	Duration	Per cent. of possible	Duration	Per cent. of possible	Duration	Per cent. of possible	Duration	Per cent. of possible	Duration	Per cent. of possible
	hr.	%	hr.	%	hr.	%	hr.	%	hr.	%	hr.	%	hr.	%	hr.	%	hr.	%	hr.	%	hr.	%	hr.	%
1	2·7	40	···	···	4·4	42	1·4	11	4·1	27	12·2	70	2·6	15	12·6	78	8·0	58	···	···	0·1	1	*5·5*	77
2	4·0	60	···	···	8·7	82	4·1	31	8·2	53	9·8	56	2·9	16	11·3	70	*9·5*	68	···	···	0·2	2	3·2	45
3	···	···	···	···	8·3	83	0·8	6	2·6	17	···	···	4·3	24	1·3	8	···	···	5·1	45	5·3	60	···	···
4	···	···	···	···	*8·9*	*83*	3·9	29	···	···	···	···	4·2	24	4·1	26	0·3	2	*9·2*	81	5·6	63	0·1	1
5	···	···	···	···	8·5	79	···	···	···	···	2·3	13	5·5	31	6·2	39	2·9	39	*9·2*	*82*	3·8	43	0·5	7
6	···	···	···	···	7·2	66	5·3	40	0·1	1	0·7	4	7·6	43	0·6	4	6·0	44	5·2	47	···	···	···	···
7	···	···	···	···	4·5	41	4·1	30	0·5	3	2·3	13	7·5	43	1·3	8	1·7	13	6·2	56	···	···	···	···
8	···	···	0·1	1	8·6	77	0·2	1	8·0	50	2·4	14	14·6	83	12·7	80	3·7	28	4·0	36	···	···	···	···
9	1·6	23	···	···	7·5	67	2·8	20	9·6	60	8·1	46	4·3	25	*13·0*	83	2·6	20	0·8	7	2·2	26	0·1	1
10	···	···	···	···	···	···	1·3	9	11·5	72	···	···	6·4	37	5·8	37	6·0	45	5·0	46	*7·3*	*87*	0·1	1
11	···	···	···	···	2·0	18	2·8	20	12·4	77	···	···	5·0	29	5·3	34	0·9	7	···	···	···	···	0·4	6
12	1·9	27	···	···	3·6	32	*11·6*	*83*	3·8	23	0·7	4	10·4	60	4·9	32	6·0	46	0·6	6	···	···	0·7	10
13	···	···	···	···	···	···	···	···	···	···	5·9	33	10·5	61	12·5	81	6·1	47	7·7	73	2·1	26	···	···
14	0·4	6	···	···	7·9	68	8·0	57	2·4	15	1·1	6	*15·3*	*88*	12·5	82	1·3	10	4·8	46	1·9	23	1·0	15
15	3·4	47	···	···	7·8	67	6·8	48	5·3	32	5·0	28	11·2	65	3·9	25	1·3	10	1·2	12	2·0	25	···	···
16	···	···	···	···	···	···	6·6	46	14·0	*85*	8·9	50	0·5	3	11·8	78	0·1	1	5·9	57	3·8	47	0·6	9
17	*5·1*	*69*	0·1	1	1·1	9	9·0	63	13·5	82	1·2	7	1·2	7	···	···	7·7	61	3·4	33	6·1	77	···	···
18	3·5	47	5·1	53	···	···	1·9	13	···	···	1·8	10	12·8	75	4·3	29	6·1	48	···	···	4·7	59	···	···
19	4·1	55	0·1	1	···	···	8·5	59	6·8	41	13·0	73	10·9	64	10·4	69	···	···	1·0	10	1·0	13	···	···
20	4·1	55	3·3	34	···	···	0·2	1	*14·2*	*85*	0·6	3	7·8	46	11·6	78	···	···	3·0	30	···	···	1·0	15
21	4·6	61	0·3	3	···	···	3·7	25	6·7	40	4·3	24	0·9	5	4·0	27	6·0	48	4·8	48	···	···	0·1	2
22	···	···	3·2	32	0·3	2	4·8	33	0·3	2	8·9	50	10·3	61	7·1	48	0·7	6	2·5	25	···	···	···	···
23	···	···	6·3	63	···	···	3·1	21	9·0	53	2·4	13	5·5	33	10·7	73	5·4	44	0·3	3	···	···	1·1	17
24	···	···	0·4	4	7·1	57	5·4	36	10·5	62	2·1	12	9·8	58	11·1	76	2·2	18	···	···	6·0	80	1·2	18
25	2·2	28	*6·9*	*68*	7·8	62	···	···	···	···	12·0	67	8·7	52	7·8	54	0·5	4	0·1	1	3·5	47	4·7	71
26	···	···	···	···	···	···	10·3	69	2·9	17	9·2	52	1·0	6	7·6	53	4·4	37	···	···	0·4	5	3·5	53
27	···	···	3·6	35	···	···	5·2	34	11·4	67	10·0	56	12·8	77	11·6	81	0·8	7	···	···	4·1	56	0·5	8
28	···	···	0·8	8	···	···	8·4	55	13·5	78	*13·7*	*77*	0·1	1	12·5	*87*	8·6	73	···	···	0·5	7	1·3	20
29	···	···			···	···	0·2	1	7·2	42	6·4	36	4·5	27	3·1	22	9·4	*80*	···	···	2·5	35	···	···
30	···	···			···	···	3·9	25	4·6	27	5·5	31	10·1	62	2·7	19	4·4	38	···	···	0·4	6	1·0	15
31	···	···			···	···			···	···			2·3	14	11·1	79			···	···			···	···
Mean	1·21	–	1·08	–	3·38	–	4·14	–	5·91	–	5·02	–	6·82	–	7·59	–	3·75	–	2·58	–	2·12	–	0·86	–
											Annual mean		3·73	–										

DURATION OF BRIGHT SUNSHINE

Monthly and annual totals between exact hours, local apparent time

80 ABERDEEN: h_s = 20·7 m.

	Hour L.A.T. 3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	Total	per cent. of possible
	hours																			%
Jan.	–	–	–	–	···	···	2·6	7·1	8·3	*9·2*	7·6	2·7	0·1	···	–	–	–	–	37·6	16
Feb.	–	–	–	···	···	1·6	4·1	4·2	4·9	*5·5*	3·7	3·2	3·0	···	···	–	–	–	30·2	12
Mar.	–	–	···	0·4	6·0	10·1	11·3	*12·8*	12·4	12·1	12·0	11·9	9·4	5·6	0·7	···	–	–	104·7	29
Apr.	–	···	3·5	7·2	9·2	9·0	8·9	9·8	11·3	11·4	*12·2*	11·0	10·7	9·6	7·3	3·2	···	–	124·3	29
May	···	0·8	6·9	11·2	11·5	12·3	14·8	15·0	15·4	*15·9*	15·6	15·1	15·2	12·8	12·0	7·4	1·2	···	183·1	36
June	···	4·9	8·7	8·4	8·4	8·8	8·5	10·5	*11·9*	11·1	10·7	10·7	11·7	11·1	8·8	9·3	6·4	0·6	150·5	28
July	0·3	6·8	10·1	8·8	12·2	16·2	15·7	12·4	16·0	*17·2*	15·7	14·6	16·6	15·4	13·7	11·4	8·2	0·2	211·5	40
Aug.	···	0·3	4·4	10·9	14·8	16·8	16·5	17·5	19·7	*23·7*	21·3	22·3	21·7	20·5	17·8	7·1	0·1	···	235·4	50
Sept.	–	–	0·1	3·0	8·7	11·5	13·3	*15·0*	12·1	11·8	9·9	8·8	9·7	7·0	1·7	···	–	–	112·6	29
Oct.	–	–	–	···	3·0	4·9	10·2	10·7	*12·3*	10·9	9·2	9·6	6·7	2·5	···	–	–	–	80·0	25
Nov.	–	–	–	–	···	2·7	9·0	*11·7*	11·0	10·6	8·6	7·3	2·6	···	–	–	–	–	63·5	26
Dec.	–	–	–	–	–	···	0·9	3·7	6·3	5·5	*7·1*	3·1	···	–	–	–	–	–	26·6	13
Annual	0·3	12·8	33·7	49·9	73·8	93·9	115·8	130·4	141·6	*144·9*	133·6	120·3	107·4	84·5	62·0	38·4	15·9	0·8	1360·0	30

Mean speed and highest instaneous speed recorded each day (0h. to 24h., G.M.T.) by the pressure-tube anemograph

81 ABERDEEN: h_s (height of anemograph above M.S.L.) = height of ground above M.S.L. + height of anemograph above ground = 24 m. + 13 m.

	JANUARY		FEBRUARY		MARCH		APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER		OCTOBER		NOVEMBER		DECEMBER	
	Mean	Max. gust	Mean	Max. gust	Mean	Max. gust	Mean	Max. gust	Mean	Max. gust	Mean	Max. gust	Mean	Max. gust	Mean	Max. gust	Mean	Max. gust	Mean	Max. gust	Mean	Max. gust	Mean	Max. gust
	metres per second																							
1	4·1	22	6·4	16	5·1	16	4·0	16	6·4	*20*	1·5	7	1·0	6	2·5	10	1·1	6	2·0	11	3·2	14	1·3	6
2	2·0	14	8·1	18	4·9	12	2·2	9	3·8	10	1·1	7	1·7	8	2·8	10	2·5	7	1·9	8	5·7	20	*0·6*	4
3	8·2	24	8·1	21	2·6	8	*1·5*	5	6·5	18	2·1	9	2·5	11	2·3	8	1·8	7	*1·1*	9	6·0	20	1·5	†
4	5·4	18	6·5	19	2·9	8	2·4	12	*7·0*	18	1·5	8	2·4	10	1·3	5	2·0	9	1·4	6	3·9	16	2·6	8
5	8·2	21	4·2	13	3·4	8	5·2	19	5·5	14	1·8	7	*5·4*	*20*	1·1	7	2·2	8	1·9	8	3·2	12	4·4	18
6	*9·4*	23	3·0	11	2·0	9	7·4	22	3·2	12	*5·2*	14	3·9	15	2·6	10	*1·1*	8	2·2	11	1·9	9	4·4	14
7	8·6	22	5·1	15	1·4	5	5·1	17	1·6	5	2·5	11	2·7	11	1·9	7	1·2	10	2·6	6	2·1	7	2·2	9
8	9·0	24	7·0	17	2·6	7	2·1	11	1·6	6	3·4	13	1·1	6	2·4	11	2·5	11	3·8	14	3·5	16	1·3	5
9	3·2	19	8·6	21	2·6	6	2·2	9	1·8	7	5·1	*17*	2·9	11	*3·7*	*13*	3·0	16	3·2	13	2·7	9	1·9	7
10	4·1	16	*9·1*	23	5·4	17	2·1	9	1·7	6	1·0	4	1·1	6	2·1	8	2·7	11	2·6	10	3·4	13	2·9	11
11	7·8	25	6·3	15	4·3	13	3·4	15	1·9	7	1·6	9	*0·9*	5	1·0	5	3·5	14	4·7	15	*1·4*	9	1·2	5
12	2·0	14	4·6	13	2·4	11	4·0	15	1·9	8	*1·0*	5	2·1	10	1·7	7	3·1	13	4·6	*16*	3·9	11	3·4	11
13	7·0	*26*	4·0	13	*6·7*	17	4·1	19	*0·8*	5	3·4	12	2·0	10	2·3	10	2·0	11	1·7	7	5·8	17	1·6	10
14	3·9	14	3·3	11	4·3	14	4·3	16	1·5	8	1·6	5	2·5	12	1·3	6	3·5	17	3·0	10	3·2	13	1·8	7
15	7·2	25	3·7	10	3·2	15	4·4	16	3·1	11	3·5	14	3·0	11	3·5	10	3·6	14	3·9	15	5·5	19	2·9	9
16	3·7	14	2·7	8	3·4	16	4·7	18	2·8	10	3·2	10	2·3	9	1·0	8	3·8	22	2·9	13	7·0	17	4·9	11
17	3·5	13	2·2	9	2·8	14	4·4	16	3·2	12	3·5	13	1·9	8	1·2	7	1·5	8	2·3	11	5·9	17	4·9	15
18	2·8	9	4·4	11	6·0	17	3·0	14	1·9	11	1·8	8	2·1	10	1·9	7	1·3	6	1·4	7	3·1	9	4·1	11
19	*1·0*	4	2·4	9	4·4	12	3·5	16	2·7	11	2·5	11	1·3	7	1·9	7	2·7	10	2·2	8	1·7	7	6·9	18
20	2·1	7	2·7	11	2·0	9	5·6	18	2·6	9	1·5	6	1·7	6	1·2	6	1·2	9	2·4	9	4·3	13	6·3	19
21	2·2	9	4·3	15	5·2	17	*7·8*	23	3·4	9	3·7	13	2·7	9	1·9	7	4·2	15	2·0	8	2·7	12	*7·7*	20
22	1·6	9	2·3	11	3·5	14	6·4	22	3·1	11	4·3	15	2·5	9	1·5	6	*6·4*	*23*	2·6	7	2·1	10	4·9	18
23	1·9	8	3·2	11	*1·2*	8	4·9	19	1·5	4	2·1	9	2·8	9	1·1	6	5·7	20	2·4	9	3·7	19	4·6	18
24	2·9	8	3·3	19	6·5	*20*	6·4	19	2·8	12	3·0	12	2·7	11	2·8	9	1·6	7	4·1	11	7·1	20	2·2	12
25	3·8	15	3·2	9	3·4	14	5·7	*24*	2·2	10	2·6	9	1·3	6	1·2	6	1·5	8	4·8	12	*9·5*	*25*	4·8	18
26	4·4	15	7·0	>22*	4·5	16	6·0	22	2·0	10	2·2	8	2·1	8	1·7	9	1·5	6	2·6	7	7·8	18	5·6	20
27	1·7	12	4·8	>12	2·7	9	5·8	21	1·9	10	2·4	10	2·4	9	2·3	9	2·0	11	3·2	11	5·2	18	4·5	*23*
28	1·0	6	5·3	17	2·1	7	6·5	22	2·7	11	1·1	5	2·8	11	0·9	5	4·4	18	1·9	7	3·3	11	4·5	17
29	3·7	10			1·9	13	3·3	21	3·4	13	2·1	14	3·3	14	*0·7*	5	5·6	22	3·9	14	2·9	11	2·7	7
30	2·2	11			5·2	15	6·8	18	2·4	10	1·4	7	2·0	9	1·1	6	2·7	11	*6·2*	16	3·3	11	2·7	12
31	3·4	12			4·8	15			1·9	10			1·0	7	1·5	6			2·9	12			2·9	11

* Vane partially choked with snow. † Vane frozen

WIND

Monthly and annual means of mean wind speed between exact hours, G.M.T.

82 ABERDEEN: h_a = 24 m. + 13 m.

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	metres per second																								
Jan.	4·1	3·8	3·8	3·8	*3·6*	3·6	3·6	4·0	4·1	4·3	4·2	4·4	4·5	4·6	*4·7*	4·6	4·6	4·7	4·7	4·5	4·6	4·6	4·4	4·3	4·3
Feb.	4·8	4·7	4·8	4·6	*4·4*	4·5	4·6	4·8	*5·2*	5·1	5·1	5·1	5·2	5·1	5·0	4·9	4·8	4·7	4·8	4·8	4·8	5·0	5·0	5·0	4·9
Mar.	3·8	3·8	4·1	*4·1*	4·0	3·8	3·7	3·4	3·4	3·7	3·7	4·0	4·1	4·0	4·0	4·0	3·6	3·2	3·1	*3·0*	3·1	3·2	3·5	3·5	3·7
Apr.	3·8	3·8	3·7	*3·7*	3·8	3·7	4·1	4·6	4·9	4·9	5·3	5·6	5·7	5·7	*5·8*	5·6	5·0	4·7	4·3	4·0	3·8	4·0	4·0	3·9	4·5
May	2·2	2·1	2·3	2·3	2·2	2·2	2·4	2·7	3·0	3·3	3·7	3·9	4·0	*4·0*	3·8	3·7	3·5	3·2	2·8	2·7	2·2	2·3	2·0	*2·0*	2·9
June	1·6	1·6	*1·4*	1·7	1·9	2·0	2·1	2·4	2·7	2·8	3·1	3·3	3·5	*3·6*	3·5	3·4	3·3	3·1	2·9	2·3	1·8	1·8	1·5	1·5	2·5
July	1·1	*1·0*	1·2	1·3	1·5	1·7	2·0	2·3	2·8	3·0	3·1	3·2	3·6	*3·6*	3·4	3·3	3·0	2·8	2·4	2·0	1·7	1·5	1·4	1·2	2·3
Aug.	0·9	1·0	1·0	1·1	1·1	1·1	1·3	1·5	1·7	2·1	2·6	2·7	3·1	*3·2*	3·2	3·1	2·7	2·5	2·0	1·6	1·3	1·2	0·9	*0·8*	1·8
Sept.	1·9	1·8	*1·7*	2·0	2·2	2·0	1·9	2·3	2·7	3·3	3·8	3·8	3·9	*3·9*	3·8	3·8	3·5	3·5	3·0	2·6	2·4	2·2	2·0	1·9	2·7
Oct.	2·2	*2·1*	2·4	2·5	2·5	2·7	2·9	2·9	3·1	3·4	3·6	3·6	3·6	3·6	*3·7*	3·5	2·9	2·5	2·5	2·5	2·5	2·5	2·5	2·2	2·9
Nov.	3·4	*3·3*	3·4	3·9	4·0	4·0	4·1	4·2	4·1	4·4	4·5	5·1	*5·3*	5·2	5·2	4·6	4·5	4·2	4·1	3·9	3·8	3·6	3·6	3·4	4·2
Dec.	3·5	3·3	3·6	3·5	3·4	3·6	3·6	3·6	3·7	3·8	3·8	*3·8*	3·7	3·7	3·4	*3·0*	3·0	3·2	3·2	3·3	3·5	3·5	3·3	3·3	3·5
Annual	2·7	*2·7*	2·8	2·9	2·9	2·9	3·0	3·2	3·4	3·6	3·9	4·0	4·2	*4·2*	4·1	3·9	3·7	3·5	3·3	3·1	2·9	2·9	2·8	2·7	3·3

DISTRIBUTION OF WIND SPEED, EXTREME VELOCITIES AS RECORDED BY PRESSURE-TUBE ANEMOGRAPH

83 ABERDEEN: h_a = 24 m. + 13 m.

	DISTRIBUTION OF WIND SPEED								EXTREME VELOCITIES				
	More than 17·1 m./sec.		10·8 to 17·1 m./sec.		5·5 to 10·7 m./sec.	1·6 to 5·4 m./sec.	Less than 1·6 m./sec.	No record	Highest hourly wind			Highest gust	
	Dates of occurrence	Duration	No. of days	Duration	Duration	Duration	Duration	Duration	Veer from N.	Speed	Hour ended	Speed	Date
		hr.		hr.	hr.	hr.	hr.	hr.	°	m./sec.	day h.	m./sec.	day h. m.
Jan.	–	0	5	14	215	353	162	0	310	13	13 16	26	13 15 5
Feb.	–	0	2	6	221	411	34	0	50	13	26 22	>22*	26 – –
Mar.	–	0	1	1	136	491	116	0	320	11	24 5	20	24 3 0
Apr.	–	0	1	4	257	371	88	0	280	12	25 24	24	25 23 5
May	–	0	–	0	91	435	218	0	120	9	4 16	20	1 12 10
June	–	0	–	0	50	413	257	0	310	9	9 11	17	9 14 55
July	–	0	–	0	27	447	270	0	310	9	5 14	20	5 15 25
Aug.	–	0	–	0	10	383	351	0	170	7	9 14	13	9 11 35
Sept.	–	0	1	1	79	409	231	0	(300 (200	12	(16 18 (22 15	23	22 14 0
Oct.	–	0	–	0	59	516	169	0	120	8	30 18	16	12 12 15
Nov.	–	0	2	7	187	446	80	0	330	12	25 13	25	25 13 5
Dec.	–	0	2	2	154	416	172	0	270	12	27 18	23	27 17 55
Year	–	0	14	35	1486	5091	2148	0	50	13	Feb. 26 22	26	Jan. 13 15 5

* Vane partially choked by snow.

TEMPERATURE IN THE GROUND AT DEPTHS OF 30 CM.(1ft.) AND 122 CM.(4ft.) AT 9h., G.M.T.

84 ABERDEEN

	JANUARY		FEBRUARY		MARCH		APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER		OCTOBER		NOVEMBER		DECEMBER	
	30 cm.	122 cm.	30 cm.	122 cm.	30 cm.	122 cm.	30 cm.	122 cm.	30 cm.	122 cm.	30 cm.	122 cm.	30 cm.	122 cm.	30 cm.	122 cm.	30 cm.	122 cm.	30 cm.	122 cm.	30 cm.	122 cm.	30 cm.	122 cm.
	degrees Absolute																							
1	75·6	78·3	74·7	77·0	73·9	76·1	76·4	75·9	80·0	79·1	85·7	82·8	88·9	85·1	88·8	86·9	88·9	87·5	83·7	85·6	82·5	83·7	76·5	80·2
2	75·6	78·3	74·7	77·0	73·9	76·1	76·6	76·3	80·0	79·1	86·7	82·9	88·9	85·2	89·1	86·9	88·6	87·5	84·1	85·5	82·6	83·6	76·2	80·1
3	75·3	78·1	74·7	77·0	74·0	76·2	76·5	76·3	80·4	79·2	87·2	82·9	88·6	85·3	89·1	86·9	88·9	87·5	84·4	85·3	82·9	83·6	75·8	80·1
4	76·4	78·1	74·7	76·9	73·8	76·1	76·5	76·3	79·7	79·3	86·5	83·1	88·5	85·3	89·1	86·9	88·5	87·4	84·4	85·3	82·5	83·6	75·5	79·7
5	76·6	78·1	74·7	76·9	73·7	76·1	76·3	76·4	79·1	79·3	86·2	83·3	87·9	85·5	89·1	86·9	88·1	87·4	84·1	85·2	82·1	83·5	75·3	79·7
6	76·7	78·0	74·7	76·9	73·7	75·9	76·3	76·5	79·1	79·4	86·4	83·5	87·3	85·4	88·9	86·9	87·5	87·3	84·2	85·1	81·9	83·5	75·2	79·5
7	76·3	78·0	74·7	76·9	73·7	75·9	77·0	76·6	79·7	79·4	85·7	83·5	86·9	85·5	89·1	86·9	87·5	87·3	84·1	85·1	82·1	83·5	75·8	79·3
8	75·9	78·0	74·5	76·9	73·7	75·9	77·1	76·6	80·1	79·5	85·3	83·6	86·7	85·5	88·8	86·9	87·5	87·3	84·1	85·1	82·1	83·3	76·4	79·1
9	76·1	78·0	74·5	76·8	73·6	75·9	77·2	76·8	81·3	79·5	85·3	83·7	87·3	85·5	88·9	87·0	87·1	87·1	84·3	85·1	82·5	83·3	76·7	79·0
10	75·9	77·9	74·5	76·8	73·5	75·9	77·5	76·9	82·3	79·6	85·1	83·7	86·9	85·5	88·6	87·0	86·8	87·1	84·1	85·1	82·1	83·2	76·4	79·1
11	76·3	78·0	74·4	76·8	73·5	75·9	78·5	76·9	82·5	79·7	85·2	83·7	87·3	85·5	88·7	86·9	87·2	86·9	84·1	84·9	81·4	83·1	76·9	79·0
12	76·5	77·8	74·5	76·8	73·5	75·9	79·0	77·1	83·1	79·9	84·7	83·7	87·5	85·5	89·1	86·9	87·1	86·9	84·7	84·9	81·3	83·1	77·1	79·0
13	75·9	77·9	74·3	76·7	73·5	75·9	79·3	77·1	83·5	80·1	84·7	83·7	88·0	85·6	89·1	87·0	87·0	86·9	84·9	84·9	80·9	83·1	78·1	78·9
14	75·9	77·8	74·3	76·7	73·5	75·8	79·2	77·5	82·9	80·3	84·9	83·7	88·7	85·7	89·2	87·0	86·8	86·9	84·1	84·8	80·3	83·0	78·5	78·9
15	76·5	77·8	74·3	76·7	73·5	75·8	79·7	77·5	83·0	80·6	85·1	83·7	89·1	85·7	89·7	87·0	86·4	86·9	84·3	84·8	79·6	82·9	78·5	79·1
16	77·1	77·8	74·4	76·7	73·5	75·8	80·3	77·8	83·1	80·7	85·1	83·7	89·1	85·8	89·1	87·0	86·9	86·8	83·5	84·7	79·1	82·7	78·5	79·1
17	77·1	77·9	74·3	76·5	73·5	75·8	80·5	77·9	83·5	80·8	85·5	83·8	88·9	85·9	89·6	87·1	86·2	86·6	82·9	84·7	78·5	82·5	78·5	79·1
18	76·3	77·9	74·2	76·5	73·4	75·7	79·9	78·1	83·8	80·9	85·8	83·8	89·1	86·0	89·6	87·1	85·8	86·6	82·5	84·6	77·5	82·3	78·6	79·1
19	75·9	77·9	74·1	76·5	73·1	75·3	79·7	78·3	83·9	81·1	85·9	83·9	89·3	86·1	89·7	87·1	85·8	86·5	82·5	84·5	77·0	82·1	78·7	79·2
20	75·4	77·9	74·1	76·5	73·3	75·3	80·3	78·5	83·9	81·3	86·7	84·1	89·1	86·2	89·9	87·1	85·8	86·4	83·0	84·3	76·5	81·8	79·1	79·3
21	75·2	77·9	74·1	76·5	73·5	75·3	79·9	78·5	84·1	81·3	86·6	84·0	89·9	86·3	90·0	87·3	86·2	86·3	82·8	84·3	77·4	81·5	78·9	79·3
22	75·2	77·9	74·1	76·4	73·5	75·3	79·9	78·6	84·1	81·5	86·9	84·1	89·1	86·5	89·7	87·2	85·8	86·3	82·5	84·1	78·5	81·2	79·1	79·5
23	74·8	77·6	74·0	76·5	73·5	75·3	79·7	78·7	83·6	81·7	86·9	84·1	89·1	86·5	90·1	87·3	85·1	86·3	83·1	84·1	79·2	81·2	79·2	79·5
24	74·7	77·5	74·0	76·3	73·5	75·3	79·2	78·7	84·3	81·7	86·2	84·3	89·1	86·6	90·3	87·3	84·5	86·1	83·6	84·1	78·6	81·0	79·1	79·6
25	74·7	77·5	74·0	76·3	73·7	75·3	79·3	78·8	84·8	81·8	86·3	84·3	89·1	86·7	90·1	87·4	85·1	86·1	83·5	84·1	78·1	81·1	79·1	79·7
26	74·9	77·5	74·0	76·3	74·2	75·3	79·1	79·0	84·5	81·9	86·3	84·3	89·1	86·7	89·7	87·4	85·2	85·9	83·1	84·1	77·9	80·9	78·1	79·7
27	74·9	77·5	73·9	76·3	75·1	75·4	79·7	78·9	84·6	82·1	87·5	84·5	88·9	86·7	89·6	87·5	85·2	85·8	82·9	84·1	77·5	80·9	77·5	79·7
28	74·9	77·4	73·9	76·3	75·4	75·5	79·9	78·9	85·1	82·3	88·1	84·6	89·3	86·8	89·4	87·5	85·1	85·8	82·9	84·1	77·1	80·8	77·1	79·6
29	74·9	77·4			75·8	75·6	79·9	79·1	85·5	82·3	88·7	84·7	88·8	86·9	89·5	87·5	84·4	85·8	82·7	83·9	76·9	80·5	76·9	79·7
30	74·8	77·3			76·2	75·8	79·9	79·1	85·7	82·5	88·7	84·8	88·7	86·9	89·3	87·5	83·6	85·7	82·5	83·9	76·9	80·4	76·3	79·4
31	74·7	77·1			76·2	75·9			85·7	82·5			89·1	86·9	89·1	87·5			82·5	83·8			76·1	79·2
Mean	75·7	77·8	74·3	76·7	73·9	75·7	78·7	77·7	82·8	80·7	86·2	83·8	88·5	86·0	89·4	87·1	86·5	86·7	83·6	84·6	79·8	82·4	77·4	79·4
											Year		81·4	81·6										

MINIMUM TEMPERATURE "ON THE GRASS" DURING THE INTERVAL 18h. TO 7h., G.M.T.

85 ABERDEEN

	JANUARY	FEBRUARY	MARCH	APRIL	MAY	JUNE	JULY	AUGUST	SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER
	degrees Absolute											
1	66·4	72·8	(69·1)*	73·0	74·5	82·5	85·1	78·2	79·9	79·6	78·1	63·0
2	66·9	72·1	(69·2)*	72·5	77·3	80·3	81·1	83·6	78·2	81·8	78·0	*62·7*
3	66·3	72·7	63·3	68·5	74·2	83·0	82·1	83·5	85·7	77·5	74·9	64·0
4	77·5	73·6	61·3	71·5	75·5	82·5	76·8	83·7	80·1	74·5	72·2	66·1
5	76·9	71·9	65·7	*67·4*	75·3	82·7	81·9	81·2	83·1	72·7	75·1	69·5
6	74·5	71·0	61·9	75·2	(–)†	80·2	79·3	83·6	74·1	80·0	73·4	78·1
7	74·7	70·3	(<65·8)*	76·9	78·5	78·5	76·3	82·9	78·1	71·3	80·9	77·5
8	73·0	71·5	*60·9*	70·7	*71·3*	79·7	*73·5*	80·9	78·3	81·5	74·2	74·7
9	72·5	71·5	64·9	70·3	76·5	78·5	78·1	*76·9*	79·1	76·1	79·0	72·5
10	71·4	72·5	65·5	73·0	76·7	76·1	79·1	83·0	77·5	77·5	72·2	70·4
11	77·3	71·5	72·5	74·7	74·1	81·9	76·2	81·7	85·2	80·3	73·1	72·6
12	68·1	71·0	66·6	76·3	77·7	80·3	77·5	82·1	79·7	86·3	78·0	73·1
13	71·3	71·1	71·9	75·9	78·5	73·6	79·1	79·3	82·6	75·7	71·5	80·1
14	68·9	71·5	69·1	78·8	79·1	77·8	81·9	81·1	77·4	71·7	71·9	75·1
15	78·3	71·9	65·2	74·1	76·8	79·0	79·0	85·9	82·5	79·3	68·5	75·2
16	74·7	71·6	72·1	80·1	73·7	*72·9*	86·8	79·7	86·2	75·2	69·9	76·9
17	70·9	67·5	72·4	72·1	74·5	82·9	84·7	78·8	74·5	*69·8*	68·7	77·9
18	68·9	70·2	72·5	70·9	80·7	82·3	87·1	86·8	74·5	73·0	66·3	77·5
19	67·5	71·3	72·9	77·1	81·5	77·9	79·4	84·1	76·9	73·5	*64·2*	79·3
20	69·9	65·7	74·5	78·7	74·9	80·1	79·7	83·5	82·0	77·8	69·9	79·1
21	67·8	71·1	73·7	76·3	79·1	80·3	86·5	82·5	83·1	71·5	76·5	76·8
22	*66·1*	70·2	72·6	75·0	78·3	81·5	80·1	–§	75·3	76·9	78·5	80·5
23	68·5	64·3	71·3	74·6	79·9	74·6	79·6	85·5	75·8	83·1	75·7	80·9
24	68·5	66·5	73·2	73·1	77·0	78·5	81·9	80·1	74·1	81·1	72·2	76·9
25	71·5	65·3	68·5	70·3	80·8	82·8	75·7	86·3	82·7	81·5	73·2	74·0
26	73·7	*62·5*	74·7	74·5	80·2	79·7	82·1	78·5	75·3	78·5	70·3	72·5
27	72·5	(72·5)*	74·6	78·2	75·7	85·6	81·3	78·5	76·3	79·1	72·5	68·0
28	72·4	(71·0)*	76·5	73·3	77·5	82·6	84·9	78·5	74·3	80·1	71·8	74·0
29	71·3		75·9	73·5	77·8	84·5	81·9	79·5	*69·8*	76·3	71·9	67·9
30	71·3		75·9	73·7	79·9	84·1	82·0	85·2	72·2	80·2	70·8	65·7
31	69·5		75·1		82·5		84·7	78·6		80·3		67·4
Mean	71·4	70·2	70·0	74·0	77·3	80·2	80·8	81·8	78·5	77·5	73·1	73·2
						Year	75·7					

* Buried under snow. † Spirit column broken. § Not set.

The initial 2 or 3 of the readings is omitted, i.e. 275·0 degrees is printed 75·0.

The minimum "on the grass" refers to the interval from 18h. on the previous day to 7h. on the day to which it is entered.

Add 0·16° to obtain temperature in degrees Kelvin where $T(°K.) = t(°C.) + 273·16$.

ESKDALEMUIR

ESKDALEMUIR OBSERVATORY

Latitude	55°19′N.
Longitude	3°12′W.
G.M.T. of Local Mean Noon	12h.13m.

Height of site above M.S.L. 235 to 250 metres

INTRODUCTION

Reference should be made to the *Observatories' Year Book, 1938*, for details of site and meteorological instruments. The only important change since that date was the replacement of the Beckley rain-gauge by the Dines tilting-siphon rain gauge in September 1940.

Notes on the meteorological summaries

The extreme temperatures during the year were 298·7°A. (78·3°F.) on August 14 and 256·4°A. (2·1°F.) on February 24. With a mean temperature of 264·9°A. (17·4°F.), March 3 was the coldest day of the year and August 18, with 291·8°A. (65·8°F.), was the hottest. The mean monthly temperature for August, 288·3°A. (60·5°F.), was the highest monthly temperature so far recorded being 1·6°A. above the highest ever for the month named. There were 30 "ice days", i.e. days with maximum temperature below 273°A.

The total rainfall for the year, 1371·1 mm. (54·00 in.), was less than normal. Snow fell on 70 days. The total duration of bright sunshine, 1143·1 hr., was below normal but August with 259·7 hr. was the sunniest month of that name on record.

The highest gust of wind during the year was 31·5 m./sec. (70 m.p.h.) on April 21. The highest hourly speed, 21·0 m./sec. (47 m.p.h.), also occurred on the same day.

The results of the harmonic analysis of the diurnal inequalities of pressure are set out in the accompanying table (Table 86). For the purpose of comparison the corresponding data are also given derived from the mean inequalities for the period 1911–20 by Dr. A. Crichton Mitchell.*

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* MITCHELL, A.C. On the diurnal variation of atmospheric pressure at Eskdalemuir and Castle O'er, Dumfries-shire. *Quart. J.R. met. Soc., London*, **50**, 1924, p. 127.

TABLE 86 - HARMONIC COEFFICIENTS OF THE DIURNAL INEQUALITY OF ATMOSPHERIC PRESSURE

Values of c_n, α_n in the series $\Sigma c_n \sin(15nt + \alpha_n)$, t being local time reckoned in hours from midnight

	c_1		α_1		c_2		α_2		c_3		α_3		c_4		α_4	
	1947	1911-1920	1947	1911-1920	1947	1911-1920	1947	1911-1920	1947	1911-1920	1947	1911-1920	1947	1911-1920	1947	1911-1920
	mb.	mb.	°	°	mb.	mb.	°	°	mb.	mb.	°	°	mb.	mb.	°	°
January	0.50	0.09	323	346	0.18	0.23	136	152	0.18	0.13	1	345	0.08	0.05	140	214
February	0.16	0.12	142	215	0.26	0.27	146	138	0.11	0.08	339	341	0.03	0.04	98	68
March	0.12	0.13	54	185	0.31	0.30	147	145	0.02	0.05	9	335	0.03	0.05	3	25
April	0.69	0.21	23	92	0.27	0.30	167	155	0.04	0.02	195	156	0.06	0.05	350	356
May	0.23	0.23	65	53	0.24	0.27	161	147	0.05	0.07	145	160	0.01	0.03	350	330
June	0.02	0.15	79	54	0.14	0.23	143	146	0.10	0.08	163	161	0.01	0.02	35	326
July	0.09	0.17	171	69	0.21	0.21	148	141	0.09	0.08	158	156	0.03	0.02	5	300
August	0.27	0.11	21	115	0.32	0.24	142	148	0.07	0.06	177	157	0.06	0.05	325	331
September	0.29	0.12	48	88	0.42	0.31	159	152	0.02	0.01	248	111	0.08	0.05	330	345
October	0.18	0.11	188	76	0.35	0.31	161	159	0.07	0.06	7	8	0.04	0.04	14	33
November	0.17	0.13	140	183	0.23	0.24	183	168	0.11	0.10	21	9	0.02	0.01	228	146
December	0.20	0.14	171	97	0.24	0.21	146	147	0.11	0.12	7	4	0.07	0.07	237	213
Arithmetic mean	0.24	0.14			0.26	0.26			0.08	0.07			0.04	0.04		
Year	0.10	0.09	41	91	0.26	0.26	153	150	0.02	0.02	24	42	0.02	0.02	318	342
Winter	0.02	0.04	245	165	0.21	0.24	153	151	0.12	0.11	3	355	0.04	0.02	231	189
Equinox	0.22	0.11	38	104	0.33	0.31	157	153	0.01	0.02	338	4	0.05	0.04	349	9
Summer	0.11	0.15	53	67	0.23	0.24	148	146	0.08	0.07	162	159	0.02	0.03	347	324

"Winter" comprises the four months January, February, November, December: "Equinox" the months March, April, September, October; and "Summer" May to August.

Terrestrial Magnetism

Reference should be made to the *Observatories' Year Book, 1938*, for notes on the instruments and tables.

Notes on the results

Comparing mean values on all days of 1947 with those for 1946, it is noted that H increased by 8γ, D(west) decreased by $8'\cdot8$ and V increased by 20γ. The changes in the deduced quantities N, W, I, and T are $+17\gamma$, -40γ, $-0'\cdot1$ and $+22\gamma$. If these changes are compared with those for previous years the discontinuities introduced on 1 January 1934, in H and V and the components derived from them must be kept in mind.

The ranges between the extreme values recorded during 1947 were H 1637γ, D $2°31'\cdot6$ and V 792γ. The range of $2°31'\cdot6$ in declination is equivalent to a range of about 729γ in the component of force perpendicular to the magnetic meridian.

The K index is fully described in *Terrestrial Magnetism and Atmospheric Electricity**. Briefly, a figure is allotted on a scale 0–9 to each three-hour interval. The figure is a measure of the range of magnetic force during that period, measured from a curved line which represents the normal quiet-day variation. The figures are first allotted from the

* BARTELS, J., HECK, N.H. and JOHNSTON, H.F.: The three-hour-range index measuring geomagnetic activity. *Terr. Magn. atmos. Elect., Baltimore*, 44, 1939, p. 411.

H magnetograms and then increased, if necessary, by inspection of the *D* and *V* curves so that the most disturbed component determines the final figure. The scale of ranges in γ corresponding to the figures 0–9 varies from observatory to observatory. The lower limit of each number for Eskdalemuir is:

K	0	1	2	3	4	5	6	7	8	9
Range in γ	0	8	15	30	60	105	180	300	500	750

Beginning with 1947 some changes have been made in the tables accompanying these notes. The month by month commentary on the autographic records has been omitted, and a change has been made in the table formerly headed "Principal magnetic disturbances". It is intended that all the disturbances, which would have been included in the previous type of table, will still be included, with, however, additional disturbances of the form of sudden commencements and those which can be recognised as being solar flare effects. The table is thus divided into three parts:

(a) Disturbances noteworthy for some reason (usually, but not always, range) and without a sudden commencement.

(b) Well marked, sudden commencements whether followed by a large disturbance or not.

(c) Disturbances accompanying a solar flare or other known solar flare effect.

The time given of commencement and ending of disturbances in (a) must depend on an arbitrary judgment. The list of sudden commencements under (b) will usually be a little shorter than that given in the International Association of Terrestrial Magnetism and Electricity (I.A.T.M.E.) Bulletins because a somewhat stricter meaning has been given to the words "well marked", and also because the sharp beginnings of small polar disturbances have been omitted. The (c) table has been made as complete as possible by a careful scrutiny of the magnetograms at the time of any known solar flare or solar flare effect, but a small "crochet" can easily be masked by other disturbances. The signs given to the movements of *H*, *D* and *V* are positive for increasing *H* or *V* and an increase of force towards the east (i.e. a decreasing westerly declination).

Particulars of the same disturbances are given in both the Lerwick and the Eskdalemuir sections of the Year Book, even if the disturbance at one of the stations is relatively small. In Table 87 the values of mean absolute daily range for the months and seasons are brought together. For convenience of comparison the ranges of declination in angle have been converted to units of force of the component perpendicular to the magnetic meridian. Table 88 gives the frequency distribution of absolute daily ranges and compares the percentage distribution for 1947 with that for the 11-year period 1932-1942. Table 89 gives the average values of the diurnal inequality ranges for the year and seasons for the period 1932-1942 (not the values of the range of the representative mean diurnal inequalities for this period) along with the 1947 values expressed as a percentage of the average values. The units employed are 1γ for force and 1′ for declination.

TABLE 87 — ABSOLUTE DAILY RANGE AND MEAN MONTHLY VALUES

	Mean absolute daily range						Mean daily range expressed as percentage of yearly mean					
	1947			Mean 1932-42			1947			Mean 1932-42		
	H	*D*	*V*	*H*	*D*	*V*	*H*	*D*	*V*	*H*	*D*	*V*
	γ	γ	γ	γ	γ	γ	%	%	%	%	%	%
January	67	71	42	78	79	44	50	66	51	81	91	77
February	80	86	50	76	86	50	60	80	61	79	99	88
March	219	149	146	122	113	82	165	139	178	127	130	144
April	161	119	77	125	103	79	121	111	94	130	118	139
May	123	103	64	111	86	66	92	96	78	116	99	116
June	132	107	76	100	81	50	99	100	93	104	93	88
July	146	97	74	106	82	53	110	91	90	110	94	93
August	194	136	109	102	85	57	146	127	133	106	98	100
September	192	143	152	102	95	64	144	134	185	106	109	112
October	131	124	101	97	94	65	98	116	123	101	108	114
November	94	80	62	67	75	41	71	75	76	70	86	72
December	61	69	35	61	69	40	46	64	43	64	79	70
Winter	75	77	47	70	77	44	56	72	57	73	89	77
Equinox	176	134	119	111	101	72	132	125	145	116	116	126
Summer	149	111	81	105	84	57	112	104	99	109	97	100
Year	133	107	82	96	87	57	..	..	..	..	..	..

"Winter" comprises the four months January, February, November, December: "Equinox" the months March, April, September, October; and "Summer" May to August.

TABLE 88 — FREQUENCY DISTRIBUTION OF ABSOLUTE DAILY RANGE

Range	Number of cases, 1947			Percentage distribution					
	H	*D*	*V*	*H* 1947	*H* 1932–42	*D* 1947	*D* 1932–42	*V* 1947	*V* 1932–42
γ				%	%	%	%	%	%
0 — 9	0	0	5	0·0	0·0	0·0	0·0	1·4	3·0
10 — 19	2	1	36	0·5	1·0	0·3	0·4	9·9	15·8
20 — 29	10	7	55	2·7	4·2	1·9	2·9	15·1	22·1
30 — 39	11	6	43	3·0	6·6	1·6	5·7	11·8	16·8
40 — 49	18	19	41	5·2	8·7	5·2	8·1	11·2	9·5
50 — 59	21	19	40	5·8	11·4	5·2	13·2	11·0	6·9
60 — 69	26	23	21	7·1	13·2	6·3	14·0	5·8	5·1
70 — 79	38	40	16	10·4	10·6	11·0	12·5	4·4	3·4
80 — 89	32	44	16	8·8	9·3	12·1	10·3	4·4	2·7
90 — 99	30	53	8	8·2	6·9	14·5	7·8	2·2	2·3
100 — 109	22	46	8	6·0	5·3	12·6	5·3	2·2	1·8
110 — 119	27	20	6	7·4	4·5	5·5	3·8	1·6	1·4
120 — 129	23	18	9	6·3	2·9	4·9	3·3	2·5	1·4
130 — 139	21	10	6	5·8	2·7	2·7	2·5	1·6	0·9
140 — 149	10	8	3	2·7	1·8	2·2	1·8	0·8	0·8
150 — 159	9	4	4	2·5	1·9	1·1	1·7	1·1	0·5
160 — 169	10	8	2	2·7	1·3	2·2	1·4	0·5	0·5
170 — 179	5	5	3	1·4	1·0	1·4	0·8	0·8	0·2
180 — 189	4	7	6	1·1	0·8	1·9	0·8	1·6	0·5
190 — 199	6	4	2	1·6	0·7	1·1	0·7	0·5	0·4
200 +	40	23	35	11·0	5·2	6·3	3·1	9·6	4·0
Days omitted	0	0	0	..	..	..	..	..	..

TABLE 89 - AVERAGE RANGE OF DIURNAL INEQUALITY 1932-1942
WITH 1947 VALUE AS PERCENTAGE

		All days					International quiet days					International disturbed days				
		N	*W*	*V*	*H*	*D*	*N*	*W*	*V*	*H*	*D*	*N*	*W*	*V*	*H*	*D*
		γ	γ	γ	γ	′	γ	γ	γ	γ	′	γ	γ	γ	γ	′
Year	1932-42	37.5	40.1	25.4	36.9	8.54	34.2	37.9	12.8	33.6	8.17	51.6	55.2	71.7	52.1	11.47
	1947(%)	149	136	148	149	136	143	142	130	145	141	134	118	141	136	121
Winter	1932-42	21.0	30.2	19.5	18.5	6.70	17.6	19.1	5.6	15.7	4.23	29.2	51.9	61.0	28.8	10.86
	1947(%)	155	105	106	163	109	148	141	118	162	134	145	126	119	127	123
Equinox	1932-42	44.6	46.4	32.1	42.6	10.02	40.1	43.8	13.9	38.8	9.56	71.2	72.4	94.5	72.8	14.56
	1947(%)	144	135	169	148	134	141	139	118	145	138	144	130	151	163	132
Summer	1932-42	55.6	56.7	29.8	58.0	11.66	47.7	53.8	20.8	49.2	11.37	77.3	65.8	71.6	82.2	12.51
	1947(%)	143	133	145	141	136	138	143	135	134	141	142	120	130	142	130

"Winter" comprises the four months January, February, November, December; "Equinox" the months March, April, September, October; and "Summer" May to August.

TABLE 90 — NOTEWORTHY MAGNETIC DISTURBANCES AT ESKDALEMUIR

(a) Disturbances without S.C's

Serial Number	From		To		Range (γ)			Notes
	Date	Hour	Date	Hour	*H*	*D*	*V*	
1a	Mar. 2	08	Mar. 4	09	1404	510	595	
2a	Mar. 8	11	Mar. 9	09	878	384	469	
3a	Aug. 22	09	Aug. 23	07	537	447	292	
4a	Sept. 24	12	Sept. 25	08	1258	526	696	
5a	Oct. 2	09	Oct. 3	08	564	255	409	
6a	Oct. 9	12	Oct. 12	21	294	230	350	
7a	Nov. 9	09	Nov. 10	03	530	240	350	

(b) Disturbances with a S.C.

Serial Number	Date	Time of S.C.	End of Disturbance Date	Hour	With initial reversed stroke *H*	*D*	*V*	Magnitude main stroke of S.C. *H*	*D*	*V*	Range of following disturbance (γ). *H*	*D*	*V*
								γ	γ	γ			
1b	Jan. 4	11.16			No	Yes	No	+36	+24	-6		Small	
2b	Jan. 24	06.20	Jan. 28	05	Yes	Yes	No	-8	-10	-1	252	189	238
3b	Feb. 8	08.07	Feb. 10	18	No	No	No	+10	-5	-1	120	197	164
4b	Feb. 16	02.59	Feb. 20	16	Yes	Yes	No	+20	-19	-1	320	223	311
5b	Mar. 7	05.35			Yes	Yes	No	+8	-19	0		Small	
6b	Mar. 15	08.41	Mar. 17	10	Yes	Yes	No	-50	+62	0	435	218	362
7b	Apr. 3	15.02			Yes	Yes	Yes	+30	-5	+4		Small	
8b	Apr. 8	21.51	Apr. 9	20	Yes	Yes	No	+100	-29	-10	235	106	124
9b	Apr. 17	12.24	Apr. 20	24	Yes	Yes	No	+80	+53	-12	1546	591	655
10b	May 22	22.43			Yes	Yes	No	+72	-34	-10		Small	
11b	June 13	17.49	June 15	09	Yes	Yes	No	+96	-34	-9	355	206	308
12b	June 17	03.00	June 18	03	No	Yes	No	+25	-29	-4	233	147	183
13b	July 17	17.50	July 20	23	Yes	No	No	+300	-72	-24	808	277	384
14b	Aug. 15	09.51	Aug. 21	22	Yes	Yes	Yes	+52	+65	-12	1253	306	401
15b	Sept. 4	13.46			No	No	No	+84	-34	-5		Small	
16b	Sept. 30	18.09			Yes	Yes	No	+54	-19	-4		Small	
17b	Nov. 16	22.39			No	Yes	No	+68	-10	-10		Small	
18b	Nov. 24	17.55	Nov. 24	24	Yes	No	No	+43	-14	-5	104	158	70

(c) Disturbances due to Solar Flare

Serial Number	Date	Commencement	Max.	End	Movement (γ) H	D	V	K	K'	Flare or S.F.E.
1c	Jan. 14	09.50	09.53	10.02	-9	-4	+1	1	1	F.O.
2c	Mar. 5	09.28	09.30	09.37	-10	-10	+1	2	2	F.O.
3c	Apr. 6	11.51	11.57	12.10	-64	+15	+6	4	4	F.O.
4c	May 6	10.12	10.16	10.23	-16	+3	+2	2	2	F.O.
5c	Aug. 1	15.17	15.18	15.20	-6	+38	+6	4	4	Flare class 2. F.O.

F.O. = Fade out.

Irregular changes in declination:- In connexion with the supply of declination data to mine surveyors, it has been the practice to classify the hourly periods between the exact hours G.M.T. into four groups according to the range in declination within each period. The range limits which were adopted in consultation with representative mine surveyors are: less than 5′, between 5′ and 15′, between 15′ and 30′, and greater than 30′. The range is less than 5′ in about 85 per cent of the hourly periods. The actual frequencies of occurrence in the last three of the four divisions mentioned are set out below.

Number of cases per month

Range interval	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year
5′ to 15′	92	68	220	117	105	107	92	204	235	189	91	70	1590
15′ to 30′	15	8	31	6	5	7	6	17	39	23	8	1	166
>30′	0	0	12	3	1	1	1	3	12	2	3	0	38

Hourly distribution

Range interval	*Hour ending at (G.M.T.)* 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
5′ to 15′	71	76	74	72	69	65	57	73	67	65	111	104	54	35	44	59	64	63	49	52	58	65	60	83
15′ to 30′	10	6	6	8	5	4	8	4	3	3	3	3	2	0	3	4	7	8	14	10	20	15	16	4
>30′	5	3	0	2	1	0	0	1	2	2	1	0	0	0	1	1	1	1	3	4	1	3	3	3

PRESSURE AT STATION LEVEL

Maximum, minimum and daily mean values in millibars for each day 0h. to 24h., G.M.T.
The initial 9 or 10 of the values is omitted, i.e. 1005·61 is printed 05·61

91 ESKDALEMUIR: h_b(height of barometer cistern above M.S.L.) = 237·3 m.

	JANUARY			FEBRUARY			MARCH			APRIL			MAY			JUNE		
	Max.	Min.	Mean	Max.	Min.	Mean	Max.	Min.	Mean	Max.	Min.	Mean	Max.	Min.	Mean	Max.	Min.	Mean
									millibars									
1	83·0	70·1	78·4	82·4	77·2	80·7	80·8	78·6	79·6	72·9	68·5	70·7	97·9	91·1	94·9	87·2	85·0	85·9
2	88·9	72·4	84·0	77·2	65·7	70·7	86·9	80·8	84·1	76·5	72·3	73·9	*98·0*	92·8	96·2	87·0	82·3	84·7
3	85·8	78·7	80·8	66·8	*62·9*	*64·3*	88·7	86·7	87·8	76·7	72·9	74·8	92·8	83·6	86·1	84·5	81·0	83·7
4	88·0	83·3	85·8	80·1	66·8	73·2	88·7	80·1	85·2	86·0	72·9	78·9	84·8	82·1	83·3	81·0	68·2	73·7
5	83·5	72·5	78·6	86·9	80·1	84·0	80·1	75·2	76·3	86·1	63·0	75·1	85·8	83·2	84·5	69·2	*63·2*	*66·4*
6	78·9	72·5	76·7	87·0	86·0	86·5	77·0	75·0	75·9	69·0	65·3	66·9	90·0	85·7	87·3	74·2	63·6	68·2
7	79·5	76·9	78·1	86·1	80·3	83·1	78·4	76·8	77·6	82·9	65·9	74·6	90·0	86·9	88·5	78·0	73·9	75·4
8	79·6	62·3	71·7	80·3	76·2	77·8	86·0	76·7	80·8	90·5	77·2	81·5	88·1	82·9	85·1	77·8	73·9	75·3
9	79·8	62·9	71·1	78·1	75·9	77·2	*91·1*	86·0	*89·1*	05·0	90·5	99·7	89·4	82·8	86·7	98·4	77·8	90·5
10	82·0	71·4	78·6	85·9	77·7	81·6	86·3	72·2	77·0	05·5	04·3	*04·6*	88·3	82·6	84·9	*98·5*	95·6	*96·8*
11	71·4	57·4	63·8	89·7	85·9	88·1	88·7	72·3	80·2	04·5	98·9	01·7	89·8	87·9	88·7	95·9	92·6	93·8
12	67·7	51·8	61·9	89·7	88·9	89·3	89·6	77·1	86·2	*05·7*	99·8	03·7	91·0	89·3	90·2	92·9	88·9	90·6
13	68·0	*51·2*	*57·9*	90·0	88·1	88·9	77·1	62·4	66·9	04·4	88·8	96·3	89·3	81·8	85·2	88·9	81·9	85·9
14	68·8	63·8	66·1	94·8	89·8	92·1	89·3	65·3	77·2	91·5	85·2	88·5	81·8	*74·8*	*77·6*	81·9	71·5	75·9
15	76·4	65·4	69·4	00·7	94·7	97·7	90·9	76·7	86·5	92·9	89·1	90·9	84·4	77·2	80·3	82·6	70·8	74·8
16	78·6	71·9	76·2	*00·9*	97·5	*99·3*	76·7	51·7	64·4	92·9	87·1	89·7	88·5	84·4	87·0	87·6	82·6	86·3
17	90·7	75·8	84·6	97·6	90·0	93·5	78·6	63·7	74·9	95·0	90·0	93·7	88·3	81·0	84·6	88·4	85·3	87·2
18	00·9	90·7	96·6	92·0	89·7	90·8	75·2	64·3	68·3	93·6	82·3	87·8	86·2	80·2	82·1	87·0	83·6	85·7
19	01·5	98·3	00·2	92·2	88·9	91·0	64·7	60·7	62·2	82·3	76·7	80·2	95·5	86·8	91·8	86·6	84·2	85·8
20	98·7	95·2	96·4	88·9	79·0	83·6	69·1	64·6	67·9	76·7	64·0	68·9	97·1	94·9	95·8	84·2	80·5	81·4
21	97·1	94·8	96·0	79·0	73·8	75·5	67·4	*49·8*	57·0	68·8	61·3	65·3	97·5	95·8	*96·8*	87·6	82·1	84·3
22	02·4	97·0	99·2	81·6	75·1	77·5	55·7	53·8	54·7	71·0	61·7	65·5	96·0	89·1	92·5	91·9	87·6	90·7
23	08·4	02·4	05·7	87·3	81·6	84·7	53·8	50·4	*51·5*	71·2	*44·0*	*58·0*	89·1	83·3	85·8	91·5	87·5	88·8
24	*09·0*	04·0	*07·4*	87·3	84·3	85·9	76·0	53·5	66·3	89·5	56·0	77·1	83·2	77·8	79·9	87·9	78·8	83·7
25	04·0	92·8	98·7	85·9	80·1	84·2	79·2	73·4	77·5	89·6	74·8	82·3	81·6	77·7	80·0	87·1	78·4	83·0
26	96·3	92·8	94·9	80·1	64·5	68·8	73·4	66·4	69·1	94·0	83·7	90·7	83·6	80·0	81·3	86·9	84·5	85·5
27	96·9	95·7	96·3	73·5	66·4	71·4	70·8	68·3	69·6	88·9	76·0	79·8	92·5	83·1	88·3	92·6	85·5	89·2
28	95·8	90·2	93·0	80·3	72·5	76·1	68·3	65·4	67·0	83·8	74·9	78·6	93·2	90·8	91·8	93·8	87·9	91·1
29	90·2	88·2	89·3				65·4	57·2	60·0	88·2	75·2	82·3	92·4	88·0	89·8	93·1	85·7	89·1
30	88·2	81·8	84·1				64·8	55·9	59·5	91·1	78·3	85·3	93·9	91·7	92·6	95·3	93·1	94·3
31	83·5	81·5	82·5				68·6	64·3	66·3				91·5	86·7	88·4			
Mean	87·85	79·54	84·00	85·80	79·99	82·77	77·01	67·91	72·46	87·56	76·69	82·24	90·05	85·03	87·35	87·31	81·25	84·26

	JULY			AUGUST			SEPTEMBER			OCTOBER			NOVEMBER			DECEMBER		
	Max.	Min.	Mean	Max.	Min.	Mean	Max.	Min.	Mean	Max.	Min.	Mean	Max.	Min.	Mean	Max.	Min.	Mean
									millibars									
1	95·1	92·3	94·2	94·9	92·7	94·0	94·2	91·6	92·7	99·5	95·1	96·7	83·0	78·0	79·5	68·9	66·6	67·6
2	92·3	85·1	88·4	93·7	90·4	92·0	94·7	92·2	93·5	01·3	96·6	98·9	78·1	*56·8*	68·0	71·3	68·0	70·0
3	85·5	84·1	84·9	90·6	85·9	88·7	92·2	89·0	90·4	*03·0*	01·1	*02·0*	74·9	64·8	70·0	69·8	64·3	66·5
4	84·8	67·0	78·8	85·9	77·8	80·7	89·0	86·0	87·6	01·9	97·2	00·0	88·3	74·9	81·1	65·5	62·5	64·5
5	77·3	67·1	72·5	79·5	*76·6*	*77·6*	88·6	85·5	86·8	97·3	89·1	92·2	99·1	88·3	94·8	62·6	53·6	57·3
6	77·1	70·3	74·6	86·9	79·5	83·2	90·0	88·7	89·4	90·4	88·4	89·4	*99·2*	95·2	*97·0*	75·2	54·4	64·6
7	70·4	66·3	67·3	90·5	86·9	89·2	88·7	82·1	85·3	90·2	83·4	88·1	95·2	90·6	92·3	81·7	75·2	79·7
8	68·0	*64·5*	*65·9*	90·0	88·5	89·4	82·2	77·8	81·1	85·1	80·2	82·4	90·6	76·7	83·9	94·6	78·9	84·2
9	71·0	68·0	70·2	88·9	87·0	87·9	77·8	70·7	*74·1*	86·9	83·7	84·8	77·0	72·1	75·6	04·6	94·6	01·3
10	71·0	69·5	70·0	92·8	88·9	90·7	84·9	76·4	82·3	94·6	86·9	90·6	83·9	71·4	79·0	04·4	03·0	03·8
11	81·5	70·0	74·4	95·9	92·8	94·1	82·4	77·5	79·8	96·4	93·7	95·4	82·4	63·8	73·5	03·3	01·3	02·0
12	89·7	81·5	86·9	96·1	93·7	95·2	85·2	79·6	82·9	96·4	93·2	95·5	72·0	61·1	*65·4*	03·6	01·0	02·0
13	96·0	89·7	92·8	95·6	93·7	94·6	83·3	79·3	81·0	98·0	92·0	95·9	81·2	70·1	75·6	06·9	03·6	05·4
14	*97·2*	93·9	*95·9*	95·8	94·3	95·3	82·3	71·7	76·5	96·3	86·7	90·9	83·0	71·8	79·6	09·0	06·6	07·6
15	93·9	85·6	89·0	96·4	94·5	95·5	81·3	75·0	79·4	86·4	83·4	84·4	82·9	71·2	76·6	11·4	08·7	09·9
16	87·9	83·6	85·3	98·5	95·5	96·6	86·7	*69·3*	77·0	96·2	86·4	92·6	86·2	82·9	84·9	*11·6*	10·5	*10·9*
17	89·4	87·7	88·6	99·3	96·9	98·3	94·9	86·7	91·7	99·4	92·3	95·4	84·3	79·7	82·6	10·9	08·8	10·1
18	89·3	86·3	87·6	97·9	93·6	95·7	95·4	92·7	94·2	00·1	98·6	99·4	79·7	77·9	78·1	08·8	03·7	05·6
19	87·5	82·7	84·7	94·5	91·7	93·2	92·7	81·6	87·0	99·9	98·5	99·2	81·2	77·4	79·6	03·7	97·6	00·2
20	83·7	81·0	82·5	97·3	95·4	95·8	82·9	79·4	81·3	99·1	92·2	95·9	79·4	74·9	76·4	05·1	97·4	01·5
21	83·7	79·7	81·1	97·0	93·4	95·2	*02·9*	82·9	93·4	92·2	84·7	88·4	83·1	78·6	80·4	03·9	93·0	98·0
22	90·7	83·7	87·5	94·6	93·0	93·9	02·5	80·1	91·3	85·0	*79·5*	*81·5*	83·4	77·5	80·7	93·9	90·7	92·3
23	90·8	88·9	89·9	98·7	94·6	96·3	91·0	86·3	87·6	90·6	81·8	87·0	87·6	76·2	82·6	92·0	88·0	90·9
24	90·0	88·1	90·0	00·5	98·7	99·8	92·1	89·8	91·2	93·5	90·1	91·6	88·0	82·0	85·8	88·0	72·7	78·7
25	89·2	87·9	88·5	00·8	99·1	99·9	95·1	88·2	91·5	01·6	93·0	96·7	88·7	83·3	86·8	73·4	66·8	69·6
26	90·4	87·1	88·6	*01·9*	00·1	*01·0*	96·0	93·6	94·8	02·6	99·7	01·4	86·7	78·5	81·8	71·0	66·5	69·1
27	92·4	90·1	91·5	01·3	99·6	00·6	93·9	85·1	89·7	99·7	98·2	98·8	81·5	78·6	80·2	67·9	50·4	55·3
28	91·5	83·9	86·6	00·4	97·4	98·9	87·6	84·8	86·8	99·0	94·8	97·2	79·9	78·5	79·2	54·7	*48·8*	*51·7*
29	91·8	82·3	86·5	97·7	94·9	96·3	96·9	85·6	89·0	94·8	86·8	91·8	78·9	72·1	75·5	62·6	54·7	58·4
30	93·5	91·5	92·4	96·5	94·5	95·6	02·1	96·9	*00·3*	86·8	81·3	83·2	72·1	68·9	69·9	74·2	62·6	69·0
31	93·8	91·3	92·1	95·3	92·6	94·3				83·8	81·1	82·3				78·8	74·2	77·5
Mean	86·65	81·63	84·14	95·02	92·04	93·53	90·32	83·54	86·98	95·07	89·99	92·57	83·69	75·79	79·87	88·17	81·58	84·67
									Annual	87·88	81·31	84·60						

PRESSURE AT STATION LEVEL

Monthly and annual means of hourly values in millibars at exact hours, G.M.T.

92 ESKDALEMUIR: h_b = 237·3 m.

	Hour G.M.T. 0	1	2	3	4	5	6	7	8	9	10	11	Noon	13	14	15	16	17	18	19	20	21	22	23	24	Mean
	millibars																									
Jan.	83·69	83·76	83·97	84·14	84·06	83·95	83·97	84·15	84·47	84·79	*84·80*	84·77	84·45	84·10	83·85	83·78	83·78	83·62	83·63	83·63	83·63	*83·51*	83·68	83·75	83·81	84·00
Feb.	*83·10*	82·92	82·87	82·66	82·51	82·47	82·44	82·48	82·67	82·80	82·94	83·00	82·87	82·76	82·54	*82·43*	82·46	82·66	82·85	82·92	83·04	83·05	83·04	82·99	83·01	82·77
Mar.	*72·96*	72·77	72·68	72·49	72·43	72·36	72·34	*72·53*	72·75	72·77	72·68	72·71	72·57	72·39	72·19	72·08	71·96	*71·93*	72·16	72·34	72·43	72·54	72·60	72·66	72·59	72·46
Apr.	82·27	82·21	82·27	82·43	82·38	82·38	82·59	82·75	82·76	82·62	82·51	82·31	82·10	81·95	81·75	81·49	*81·38*	81·41	81·59	81·87	82·28	82·51	82·67	82·85	*83·02*	82·24
May	*87·73*	87·67	87·49	87·34	87·27	87·36	87·49	87·46	87·56	87·51	87·47	87·31	87·22	87·09	87·04	*86·93*	86·93	86·97	87·06	87·22	87·40	87·63	87·71	87·68	87·60	87·35
June	84·25	84·20	84·04	84·00	*83·96*	84·07	84·18	84·28	84·35	84·21	84·25	84·30	84·27	84·34	84·31	84·24	84·17	84·15	84·16	84·18	84·35	84·52	*84·66*	84·61	84·53	84·26
July	84·35	84·20	84·03	83·83	*83·78*	83·88	84·03	84·14	84·15	84·23	84·21	84·16	84·19	84·21	84·20	84·12	84·01	83·94	84·02	84·15	84·23	84·41	*84·45*	84·40	84·30	84·14
Aug.	93·80	93·74	93·66	93·52	93·43	93·47	93·60	93·76	93·85	*93·87*	93·81	93·74	93·61	93·52	93·35	93·13	93·00	*92·88*	92·89	93·14	93·50	93·71	93·82	93·81	93·79	93·53
Sept.	87·16	87·18	87·04	86·80	86·79	86·78	86·88	87·17	87·25	87·38	87·29	87·12	86·93	86·75	86·58	86·42	*86·27*	86·34	86·53	86·96	87·30	87·49	*87·57*	87·46	87·36	86·98
Oct.	*92·96*	92·79	92·63	92·34	*92·17*	92·21	92·29	92·53	92·70	92·88	92·92	92·90	92·70	92·55	92·42	92·31	92·20	92·36	92·57	92·67	92·75	92·80	92·63	92·59	92·43	92·57
Nov.	*80·28*	80·13	80·03	79·91	79·79	79·72	79·73	79·85	80·09	80·09	80·01	79·99	79·77	79·56	*79·44*	79·49	79·73	79·80	80·00	79·96	80·03	80·06	79·93	79·83	79·81	79·87
Dec.	84·65	84·59	84·54	84·47	84·21	*84·10*	84·16	84·25	84·47	84·76	84·91	84·93	84·75	84·58	84·49	84·63	84·72	84·75	84·85	84·95	84·97	*85·12*	85·11	85·03	84·91	84·67
Annual	84·79	84·71	84·63	84·52	84·43	84·43	84·51	84·64	84·79	*84·86*	84·85	84·80	84·65	84·51	84·38	84·28	*84·25*	84·26	84·39	84·53	84·68	84·81	84·85	84·83	84·79	84·60

The initial 9 or 10 of the value is omitted, i.e. 1001·42 is printed 01·42

PRESSURE REDUCED TO MEAN SEA LEVEL

Monthly and annual means of hourly values in millibars at exact hours, G.M.T.

93 ESKDALEMUIR: h_b = 237·3 m.

	Hour G.M.T. 0	1	2	3	4	5	6	7	8	9	10	11	Noon	13	14	15	16	17	18	19	20	21	22	23	24	Mean
	millibars																									
Jan.	13·13	13·19	13·42	13·59	13·51	13·41	13·40	13·58	13·91	*14·23*	14·21	14·14	13·77	13·40	13·13	13·07	13·12	12·98	13·02	13·04	13·03	*12·93*	13·11	13·18	13·26	13·40
Feb.	*13·00*	12·84	12·80	12·57	12·42	12·36	12·32	12·38	12·58	12·64	12·70	12·67	12·50	12·36	12·13	*12·04*	12·12	12·40	12·63	12·75	12·90	12·91	12·92	12·90	12·93	12·57
Mar.	*02·25*	02·06	01·98	01·81	01·76	01·69	01·69	01·89	02·07	01·99	01·79	01·75	01·54	01·38	01·12	01·00	*00·91*	00·95	01·26	01·50	01·61	01·73	01·81	01·90	01·85	01·63
Apr.	11·39	11·33	11·40	11·57	11·53	11·54	11·72	11·79	11·68	11·46	11·26	11·01	10·77	10·60	10·34	10·10	*10·03*	10·10	10·36	10·75	11·25	11·53	11·73	11·96	*12·14*	11·15
May	*16·56*	16·51	16·36	16·22	16·16	16·22	16·26	16·07	16·05	15·91	15·74	15·32	15·39	15·21	15·13	*15·06*	15·10	15·21	15·38	15·63	15·96	16·27	16·42	16·43	16·39	15·86
June	12·60	12·57	12·43	12·41	12·39	12·47	12·54	12·57	12·54	12·31	12·30	12·30	12·24	12·19	12·25	12·16	*12·09*	12·12	12·18	12·26	12·52	12·77	*12·97*	12·95	12·90	12·43
July	12·59	12·47	12·33	12·13	12·08	12·17	12·26	12·27	12·19	12·19	12·10	11·97	11·99	11·97	11·95	11·86	11·74	*11·70*	11·83	12·06	12·25	12·55	*12·63*	12·61	12·41	12·16
Aug.	*22·27*	22·26	22·21	22·11	22·04	22·09	22·18	22·13	21·94	21·74	21·58	21·41	21·22	21·08	20·88	20·66	20·53	*20·46*	20·59	21·06	21·61	21·94	22·15	22·22	*22·27*	21·59
Sept.	15·75	15·77	15·64	15·40	15·40	15·39	15·50	15·75	15·69	15·67	15·46	15·21	14·97	14·78	14·51	14·47	*14·35*	14·45	14·75	15·30	15·73	15·99	*16·10*	16·00	15·95	15·34
Oct.	*21·87*	21·71	21·55	21·28	21·09	21·14	21·23	21·47	21·61	21·70	21·65	21·55	21·29	21·09	20·97	20·84	*20·76*	21·02	21·34	21·49	21·61	21·67	21·50	21·49	21·35	21·36
Nov.	*09·29*	09·12	09·02	08·90	08·78	08·71	08·72	08·84	09·07	08·99	08·83	08·75	08·46	08·25	*08·14*	08·22	08·55	08·67	08·93	08·91	09·00	09·05	08·95	08·86	08·84	08·78
Dec.	13·86	13·81	13·76	13·68	13·41	*13·25*	13·34	13·45	13·66	13·95	14·05	13·99	13·76	13·57	13·50	13·67	13·82	13·86	13·97	14·09	14·11	14·27	*14·28*	14·20	14·08	13·81
Annual	13·73	13·66	13·59	13·49	13·40	13·40	13·45	13·53	13·60	13·58	13·49	13·37	13·17	13·01	12·86	12·78	*12·77*	12·84	13·03	13·25	13·48	13·65	13·73	*13·74*	13·73	13·36

The initial 9 or 10 of the value is omitted, i.e. 1001·42 is printed 01·42

The monthly and annual values of pressure reduced to mean sea level are computed from the corresponding monthly and annual means of pressure at station level and of temperature. See General Introduction to the Meteorological Tables, 1938.

TEMPERATURE

Monthly and annual means of readings in degrees Absolute at exact hours, G.M.T.

94 ESKDALEMUIR: Louvered hut: h_t = 0·9 m.

	Hour G.M.T. 0	1	2	3	4	5	6	7	8	9	10	11	Noon	13	14	15	16	17	18	19	20	21	22	23	24	Mean
	degrees Absolute																									
Jan.	73·68	73·70	73·63	73·71	73·67	*73·57*	73·76	73·83	73·82	73·87	74·20	74·53	74·89	75·02	*75·14*	75·01	74·63	74·37	74·08	73·93	73·91	73·84	73·79	73·73	73·60	74·09
Feb.	69·43	69·26	*69·19*	69·22	69·29	69·38	69·40	69·34	69·33	69·98	70·68	71·46	71·87	*72·05*	72·04	71·86	71·43	70·84	70·48	70·09	69·79	69·78	69·67	69·37	69·27	70·21
Mar.	72·09	72·23	71·98	71·82	71·62	71·59	*71·43*	71·44	71·85	72·76	73·72	74·31	74·94	*75·24*	75·23	75·14	74·92	74·31	73·62	73·12	72·94	72·97	72·77	72·49	72·33	73·11
Apr.	76·20	76·08	76·01	75·94	*75·79*	75·81	76·09	76·98	78·05	78·77	79·62	80·03	80·23	80·39	*80·91*	80·70	80·31	79·87	79·20	78·23	77·43	77·02	76·77	76·34	76·24	78·03
May	80·17	80·01	79·78	79·60	*79·52*	79·79	80·63	82·05	83·28	84·13	85·29	85·95	86·23	86·68	*86·99*	86·54	86·20	85·54	84·76	83·95	82·59	81·89	81·31	80·87	80·53	83·08
June	83·62	83·33	83·07	82·94	*82·82*	83·03	83·46	84·22	85·18	86·02	86·54	87·03	87·37	87·46	87·68	*87·79*	87·69	87·24	86·80	86·20	85·26	84·57	84·07	83·77	83·48	85·29
July	84·57	84·33	83·97	83·90	*83·82*	84·08	84·66	85·69	86·52	87·24	88·03	88·73	88·90	89·23	89·37	89·42	*89·47*	89·17	88·62	87·71	86·72	85·64	85·19	84·92	84·63	86·66
Aug.	85·03	84·47	84·19	83·79	83·63	*83·52*	83·93	86·06	88·65	90·90	91·89	92·86	93·38	93·95	*94·27*	94·14	94·02	93·55	92·22	90·09	88·29	87·23	86·32	85·56	84·97	88·83
Sept.	82·20	82·20	82·13	82·01	81·96	81·91	*81·87*	82·26	83·65	85·08	86·19	86·92	*87·46*	87·41	87·39	87·17	85·79	86·48	85·55	84·46	83·71	83·06	82·86	82·54	82·14	84·30
Oct.	80·75	80·66	80·65	80·40	80·47	80·42	80·41	*80·36*	80·73	81·68	82·44	83·18	83·81	84·16	84·06	*84·24*	83·83	82·95	82·00	81·59	81·26	81·11	81·07	80·83	80·57	81·79
Nov.	76·64	76·71	76·73	76·65	76·60	76·54	76·64	76·59	76·81	77·50	78·26	78·85	*79·38*	*79·38*	79·24	78·95	78·21	77·70	77·25	77·05	76·88	76·73	76·38	76·32	*76·25*	77·41
Dec.	76·00	75·85	*75·84*	75·88	75·98	76·27	76·03	75·89	76·01	76·13	76·72	77·34	77·77	*77·94*	77·75	77·42	77·03	76·87	76·81	76·67	76·59	76·57	76·46	76·48	76·35	76·60
Annual	78·42	78·29	78·16	78·05	*77·99*	78·02	78·25	78·78	79·56	80·41	81·20	81·83	82·26	82·48	*82·58*	82·44	82·12	81·65	81·02	80·33	79·68	79·27	78·95	78·66	78·43	80·02

The initial 2 or 3 of the readings is omitted, i.e. 275·00 degrees Absolute is printed 75·00.

Add 0·16° to obtain temperature in degrees Kelvin where $T(°K.) = t(°C.) + 273·16$.

Maximum, minimum and daily mean values in degrees Absolute for each day 0h. to 24h., G.M.T.
The initial 2 or 3 of the values is omitted, i.e. 275·0° is printed 75·0°. Add 0·16° to obtain temperature in degrees Kelvin where $T(°K.) = t(°C.) + 273·16$.

95 ESKDALEMUIR: Louvered hut: h_t (height of thermometer bulb above ground) = 0·9 m.

	JANUARY			FEBRUARY			MARCH			APRIL			MAY			JUNE		
	Max.	Min.	Mean	Max.	Min.	Mean	Max.	Min.	Mean	Max.	Min.	Mean	Max.	Min.	Mean	Max.	Min.	Mean
	degrees Absolute																	
1	78·5	72·9	75·1	73·2	71·3	72·1	71·5	66·7	69·0	77·9	69·7	74·9	81·0	75·5	77·2	95·8	85·5	90·4
2	77·5	72·9	75·1	*74·3*	71·8	*73·2*	74·1	60·7	67·6	80·3	69·0	74·0	81·8	74·0	77·4	*98·0*	81·6	*91·0*
3	80·3	74·0	77·7	73·9	72·0	72·6	72·5	59·7	*64·9*	80·3	*66·6*	73·5	79·0	74·2	*76·4*	94·3	84·2	88·6
4	80·1	73·8	76·7	72·6	71·4	72·0	72·9	60·5	67·7	76·8	69·2	*73·1*	78·2	76·8	77·8	89·7	83·6	86·1
5	74·7	71·3	73·3	72·5	69·8	71·2	73·3	57·5	71·0	79·6	70·1	75·5	85·2	77·5	81·6	85·8	80·3	83·5
6	74·3	70·3	71·7	70·7	67·2	69·2	73·8	64·1	69·2	83·0	76·8	78·8	87·5	78·4	82·6	85·8	79·2	81·8
7	72·0	70·2	71·1	70·0	66·6	68·4	72·3	68·7	70·3	80·9	75·0	78·8	88·0	79·1	83·8	87·5	79·4	82·9
8	75·5	72·0	73·2	71·0	69·2	70·2	73·6	68·7	71·2	77·0	73·6	75·1	90·1	77·1	83·3	84·4	79·9	81·9
9	75·9	73·7	74·9	72·2	71·0	71·6	72·8	63·7	68·4	82·9	72·8	77·3	90·3	73·8	82·5	87·7	80·7	83·3
10	76·5	74·3	75·4	74·1	71·4	72·5	73·8	68·3	72·4	82·8	73·2	78·2	94·6	81·1	86·7	88·2	80·0	83·8
11	78·7	73·2	76·9	71·8	69·6	70·9	74·0	69·4	72·2	84·5	75·1	79·1	88·5	78·0	83·6	91·2	82·2	86·0
12	76·6	72·8	74·9	71·6	68·2	69·4	72·8	69·4	70·8	*87·5*	75·4	80·3	89·5	80·8	84·4	89·6	80·6	84·5
13	76·2	73·9	74·9	72·7	68·3	70·3	71·5	69·9	70·6	85·0	74·3	79·3	84·6	81·4	82·7	83·1	79·4	81·1
14	81·0	73·0	76·4	72·4	70·8	71·6	73·2	69·8	70·7	84·7	77·9	80·8	91·9	79·9	83·4	81·4	79·0	*79·7*
15	*81·4*	79·2	*80·4*	71·9	65·2	70·9	73·4	*59·1*	67·4	83·8	79·0	*80·9*	85·8	77·1	81·6	87·2	78·7	82·3
16	79·3	75·6	78·1	71·9	64·8	68·6	75·2	72·0	73·4	81·5	78·2	79·6	88·0	73·0	81·9	87·2	*76·0*	83·5
17	77·8	75·0	76·6	71·2	64·0	68·7	76·4	74·4	75·5	85·7	73·3	79·2	89·5	*71·5*	82·4	90·0	84·2	86·3
18	80·2	77·0	78·3	73·0	68·4	70·1	75·4	73·0	74·1	83·2	72·8	78·7	85·0	80·8	82·9	90·3	80·8	86·1
19	80·1	70·4	76·1	73·9	68·4	70·7	75·9	74·0	74·9	83·8	75·9	80·3	84·0	80·4	82·1	89·1	81·5	85·6
20	76·7	67·8	71·5	73·9	69·7	71·2	76·4	74·1	75·1	82·4	78·0	80·3	90·8	74·0	84·0	88·2	82·6	85·1
21	74·8	68·8	72·3	72·6	68·6	70·5	78·2	73·9	76·4	80·4	77·2	78·9	89·4	75·6	83·3	89·6	81·8	85·9
22	76·1	68·8	73·2	72·9	65·9	69·3	78·3	76·6	77·4	80·3	77·1	78·3	87·0	77·2	83·3	89·6	82·7	85·7
23	75·3	71·2	72·8	74·2	60·4	*65·2*	79·3	76·2	77·3	80·0	76·8	77·9	89·4	79·6	83·6	84·3	80·5	83·2
24	74·7	69·7	72·7	74·0	*56·4*	65·3	77·6	73·0	75·4	82·0	73·0	78·4	86·3	78·5	82·7	86·6	83·2	84·7
25	76·3	74·5	75·3	72·4	62·2	67·2	79·6	73·7	76·3	81·9	71·6	77·7	89·8	79·8	83·7	89·3	82·0	85·8
26	75·2	71·9	72·8	73·2	69·2	71·3	80·0	76·5	78·1	82·9	75·7	79·2	88·9	82·2	84·8	91·8	81·5	87·2
27	73·7	72·3	72·9	72·9	70·3	71·6	*82·8*	77·7	*79·7*	82·6	75·6	78·9	88·8	78·4	84·1	91·0	86·5	88·8
28	73·7	70·6	71·9	72·0	66·8	70·1	81·4	77·7	79·3	82·2	78·0	78·9	94·2	75·3	86·6	95·1	87·4	90·9
29	71·8	62·0	69·1				79·3	76·0	77·6	78·8	74·4	77·6	*95·2*	81·7	*88·8*	88·9	84·0	86·3
30	70·2	*60·4*	*66·2*				77·5	75·5	76·3	81·5	75·5	77·3	92·8	82·6	87·8	90·2	82·5	86·6
31	71·5	63·9	69·4				77·7	74·7	75·9				95·1	82·9	88·1			
Mean	76·3	71·5	74·1	72·6	67·8	70·2	75·7	70·5	73·1	81·9	74·4	78·0	88·1	78·0	83·1	89·0	81·7	85·3

	JULY			AUGUST			SEPTEMBER			OCTOBER			NOVEMBER			DECEMBER		
	Max.	Min.	Mean	Max.	Min.	Mean	Max.	Min.	Mean	Max.	Min.	Mean	Max.	Min.	Mean	Max.	Min.	Mean
	degrees Absolute																	
1	91·7	81·9	87·0	95·3	82·7	88·7	94·1	79·7	86·8	86·7	80·6	83·5	85·6	75·3	83·2	71·4	*63·6*	*67·7*
2	87·3	84·6	86·0	94·3	85·9	88·9	*94·4*	81·4	87·5	87·3	80·6	84·3	86·1	79·2	83·6	72·9	65·4	68·6
3	88·6	84·7	85·8	90·7	83·6	87·2	91·3	82·6	86·7	88·6	77·0	83·4	82·6	79·2	80·8	74·6	69·5	72·5
4	86·0	83·2	84·6	94·0	81·4	88·6	89·0	82·4	85·3	*91·3*	78·5	82·0	83·3	78·0	79·8	74·6	73·4	74·0
5	87·5	82·2	83·6	93·4	85·4	88·7	91·6	80·1	86·5	85·2	73·8	80·0	83·7	72·4	78·8	78·5	73·9	76·1
6	85·2	80·7	82·8	90·4	81·9	86·6	89·6	76·3	82·8	86·1	78·5	81·8	83·3	72·1	77·8	78·8	75·8	77·4
7	86·0	80·7	83·1	90·0	*76·5*	*84·7*	87·8	75·1	83·3	84·6	79·1	82·2	83·6	79·9	82·3	77·6	73·7	76·0
8	86·5	80·2	82·9	89·5	82·5	85·8	88·2	82·0	84·5	86·7	82·4	84·4	85·7	83·4	84·1	77·6	74·1	76·0
9	90·4	77·7	84·0	93·2	84·6	88·0	88·2	83·8	85·9	86·4	82·4	85·0	85·7	79·9	82·0	80·5	68·0	75·2
10	87·4	*75·8*	*82·2*	97·2	83·5	90·3	89·4	81·5	86·2	86·9	82·0	84·3	82·6	79·5	80·7	79·0	58·4	75·1
11	87·5	81·7	84·6	95·0	80·4	87·7	90·2	80·7	87·3	87·6	85·4	*86·5*	85·3	78·3	79·2	82·1	78·7	80·3
12	88·9	77·6	84·6	96·0	79·3	88·6	88·0	81·9	85·4	86·7	85·8	86·3	85·8	80·4	81·0	*84·6*	82·0	*82·7*
13	92·1	84·7	87·5	96·3	81·8	89·7	88·6	79·2	84·2	86·0	74·9	81·9	80·9	75·8	77·9	80·5	73·6	78·1
14	91·3	80·4	86·9	*98·7*	79·0	90·0	88·6	78·8	84·4	84·5	74·3	79·3	77·2	72·9	74·5	80·4	77·2	78·6
15	*96·5*	79·1	88·8	98·3	81·9	91·0	88·9	87·6	*88·3*	84·9	81·5	83·6	76·5	70·2	73·9	79·5	76·6	78·2
16	90·6	86·6	88·8	97·3	85·0	91·3	91·8	78·4	85·8	83·0	76·6	81·0	74·2	67·9	71·3	79·6	77·2	78·1
17	93·2	86·3	88·8	94·7	86·8	89·9	87·1	76·0	81·5	84·3	76·8	79·8	74·3	64·5	69·8	79·9	76·0	78·3
18	93·2	86·2	88·8	98·3	86·4	*91·8*	89·0	77·5	83·0	83·0	78·1	80·3	71·1	*63·5*	*66·9*	79·4	74·5	77·8
19	93·7	82·8	88·7	98·4	84·7	91·0	88·5	82·0	85·9	85·2	83·0	83·7	74·8	66·3	71·4	83·0	76·7	80·7
20	93·0	84·6	88·9	96·1	83·5	89·5	91·5	85·1	88·2	85·3	74·4	79·4	*86·3*	74·4	81·8	84·3	77·1	80·6
21	92·1	83·8	88·1	94·6	85·8	89·5	88·9	78·1	84·3	85·9	*72·8*	*78·3*	85·7	83·9	*84·9*	81·0	78·9	80·5
22	91·3	79·9	86·1	95·5	85·4	89·6	85·5	78·4	82·9	84·2	76·1	79·9	84·6	82·4	84·1	82·4	79·4	81·3
23	90·7	79·8	85·8	95·4	82·0	88·6	84·8	78·0	81·3	87·1	79·6	83·3	83·3	74·8	79·9	81·3	78·9	80·4
24	90·8	85·3	87·3	95·1	80·0	88·0	87·0	73·1	80·9	82·6	80·3	82·0	79·6	74·6	76·6	83·3	80·0	81·8
25	94·2	85·0	88·9	93·9	83·4	88·4	87·2	82·4	84·0	83·9	78·6	81·1	76·5	71·2	73·9	80·4	74·9	76·7
26	87·8	85·5	86·4	95·1	83·0	88·3	90·1	75·8	83·5	81·2	78·8	79·7	77·2	72·0	74·0	77·3	74·5	75·3
27	90·8	85·6	87·4	96·0	81·5	88·8	86·0	74·8	82·9	81·0	78·7	80·1	76·3	66·4	72·9	80·5	75·0	77·5
28	94·5	87·0	*90·6*	96·9	80·7	88·8	85·4	79·8	82·3	81·7	77·2	79·7	75·8	64·6	70·7	77·4	72·5	75·3
29	92·4	86·1	89·1	97·5	82·6	89·8	83·2	76·1	79·9	81·8	76·6	79·4	75·7	71·0	74·2	74·0	69·9	72·1
30	93·4	85·1	88·8	94·7	83·1	88·4	81·8	*70·6*	*78·1*	80·9	79·0	80·3	74·8	63·6	70·3	74·9	64·8	68·9
31	95·6	82·0	89·2	93·2	82·0	87·6				81·5	74·0	78·9				74·9	68·2	72·3
Mean	90·7	82·8	86·7	95·0	82·8	88·8	88·6	79·3	84·3	84·9	78·6	81·8	80·6	73·9	77·4	78·9	73·9	76·6
									Annual	83·6	76·3	80·0						

MEAN RELATIVE HUMIDITY AND VAPOUR PRESSURE FOR EACH DAY

Mean percentages from readings at exact hours 0h. to 24h., G.M.T.; vapour pressure from daily mean temperature and relative humidity

96 ESKDALEMUIR: Louvered hut: h_t = 0·9 m.

	JANUARY		FEBRUARY		MARCH		APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER		OCTOBER		NOVEMBER		DECEMBER	
	Rel. hum.	Vap. press.	Rel. hum.	Vap. press.	Rel. hum.	Vap. press.	Rel. hum.	Vap. press.	Rel. hum.	Vap. press.	Rel. hum.	Vap. press.	Rel. hum.	Vap. press.	Rel. hum.	Vap. press.	Rel. hum.	Vap. press.	Rel. hum.	Vap. press.	Rel. hum.	Vap. press.	Rel. hum.	Vap. press.
	%	mb.	%	mb.	%	mb.	%	mb.	%	mb.	%	mb.	%	mb.	%	mb.	%	mb.	%	mb.	%	mb.	%	mb.
1	94·5	6·7	77·7	4·4	*64·1*	2·9	79·5	5·6	83·9	6·9	82·4	16·5	80·6	12·9	88·9	15·7	82·7	13·1	86·2	10·9	95·1	11·8	95·0	3·9
2	87·7	6·2	80·5	5·0	64·3	*2·6*	72·0	4·7	81·2	*6·8*	81·9	16·9	92·0	13·8	85·3	15·4	80·2	13·2	90·1	12·1	90·7	11·6	87·9	*3·9*
3	90·0	7·7	85·6	5·1	78·5	2·6	71·2	*4·5*	90·7	7·6	90·5	16·0	87·7	13·0	*90·5*	14·7	*71·7*	11·2	91·0	11·5	80·5	8·5	95·1	5·6
4	86·5	6·9	88·9	5·0	74·7	3·1	82·8	5·1	88·3	7·6	*96·6*	14·6	82·3	11·2	77·0	13·7	81·8	11·7	86·7	10·0	83·3	8·2	96·3	6·3
5	77·7	4·8	83·5	4·5	80·4	4·2	92·7	6·8	77·2	8·6	91·5	11·6	*74·0*	*9·5*	82·4	14·7	81·3	12·6	96·1	9·6	77·0	7·1	93·0	7·1
6	81·7	4·5	83·8	3·9	70·2	3·2	77·3	7·1	86·9	10·4	84·3	9·6	83·0	10·1	79·9	12·5	81·2	9·9	85·6	9·7	93·2	8·0	93·0	7·8
7	88·9	4·7	84·5	3·7	82·7	4·1	81·7	7·5	88·0	11·4	78·7	9·6	86·5	10·7	77·7	*10·7*	96·7	12·1	87·0	10·1	97·8	11·5	94·8	7·2
8	92·3	5·7	77·8	3·9	81·4	4·4	87·9	6·2	82·5	10·3	87·9	10·0	87·6	10·7	78·1	11·5	77·6	10·6	91·1	12·3	96·0	12·7	93·1	7·1
9	94·0	6·6	86·7	4·8	75·1	3·3	81·1	6·7	81·9	9·7	*66·3*	*8·4*	75·0	9·8	75·8	12·9	88·5	13·2	96·0	13·5	88·0	10·1	87·3	6·3
10	93·8	6·8	90·0	*5·3*	86·4	5·1	95·8	8·5	78·5	12·3	93·3	12·1	90·7	10·6	77·0	15·2	86·6	13·2	89·5	12·0	83·1	8·7	93·6	6·7
11	87·9	7·1	86·7	4·5	76·0	4·4	85·3	8·0	85·4	10·9	83·5	12·5	88·2	12·0	87·5	15·0	93·1	15·2	95·0	*14·7*	93·1	8·8	97·0	9·9
12	88·3	6·2	79·7	3·7	75·3	3·9	75·5	7·7	75·3	10·1	80·4	10·9	79·0	12·8	78·7	14·0	88·7	12·8	*96·2*	14·7	83·7	9·0	86·3	10·4
13	79·4	5·6	84·5	4·2	89·7	4·6	87·0	8·3	83·9	10·1	83·0	9·0	*95·5*	15·8	*72·7*	13·8	81·3	10·8	81·6	9·3	77·0	6·7	97·0	8·5
14	94·0	7·3	89·8	4·9	78·2	4·0	88·3	9·4	*94·7*	11·9	91·7	9·0	91·9	14·6	80·5	15·6	94·0	12·7	86·0	9·0	87·0	5·9	91·0	8·3
15	*95·0*	*9·8*	83·1	4·4	73·2	3·0	95·6	*10·0*	83·5	9·3	77·9	9·1	87·8	15·8	77·0	15·9	96·0	*16·7*	88·1	11·3	82·3	5·4	80·3	7·1
16	94·4	8·3	73·8	3·3	90·7	5·7	92·0	9·0	73·7	8·4	79·7	10·1	95·2	17·1	80·0	16·8	89·7	13·3	*79·5*	8·5	79·0	4·3	76·0	6·7
17	86·8	6·9	73·0	3·3	88·1	6·4	*62·8*	6·0	76·7	9·1	85·4	13·1	88·7	15·9	88·3	16·9	84·8	9·4	89·0	8·8	82·0	4·0	78·2	7·0
18	89·8	8·0	72·1	3·6	89·3	5·9	71·7	6·6	92·7	11·3	89·8	13·5	89·1	16·0	80·1	*17·4*	84·2	10·3	95·6	9·8	81·4	*3·2*	76·5	6·6
19	88·5	6·8	*69·4*	3·6	91·2	6·4	83·8	8·6	83·3	9·6	82·1	12·0	76·9	13·7	79·7	16·5	*97·3*	14·5	90·9	11·7	80·9	4·4	79·0	8·3
20	86·3	4·7	71·4	3·8	87·0	6·2	95·1	9·7	*65·3*	8·6	91·1	12·9	77·1	13·9	87·4	16·4	92·3	15·9	85·1	8·2	*97·9*	11·1	75·7	7·9
21	89·9	5·2	85·3	4·3	87·3	6·8	*97·0*	9·0	70·3	8·8	79·1	11·8	82·0	14·1	83·7	15·7	79·3	10·6	82·0	*7·3*	97·7	*13·6*	*75·1*	7·8
22	89·6	5·6	79·3	3·7	94·9	7·9	91·9	8·2	82·8	10·4	82·5	12·1	81·2	12·2	79·5	15·0	85·9	10·5	93·0	9·3	95·9	12·7	80·4	8·8
23	80·3	4·8	71·7	*2·5*	94·2	7·8	83·1	7·2	91·4	11·7	93·4	11·6	84·7	12·5	78·5	13·9	77·0	8·4	88·3	11·1	87·3	8·7	87·4	9·0
24	*73·7*	4·4	76·3	2·6	79·1	5·8	74·3	6·7	84·2	10·1	92·9	12·8	83·8	13·7	77·6	13·2	80·2	8·7	94·0	10·8	78·2	6·2	93·5	*10·6*
25	90·3	6·5	78·1	3·1	87·5	6·8	92·8	7·9	87·2	11·2	84·0	12·4	86·0	15·5	81·1	14·2	93·4	12·3	82·8	8·9	*69·3*	4·5	86·7	6·9
26	81·0	4·9	*91·0*	4·9	94·3	8·3	75·5	7·2	84·9	11·7	83·4	13·4	89·7	13·8	83·0	14·4	82·5	10·5	79·8	7·8	72·7	4·8	83·2	6·0
27	86·3	5·2	78·8	4·3	91·4	9·0	88·2	8·2	87·0	11·5	88·8	15·9	94·3	15·5	75·8	13·6	92·3	11·3	89·8	9·1	75·2	4·6	88·0	7·4
28	87·2	4·9	77·0	3·8	94·7	*9·0*	77·0	7·7	74·0	11·5	85·7	*17·6*	91·1	*18·3*	77·3	13·9	78·0	9·1	90·7	9·0	91·8	4·7	88·5	6·4
29	89·9	4·1			*95·7*	8·1	84·3	7·2	79·0	14·2	90·4	13·8	89·3	16·3	73·5	14·1	75·1	7·5	88·5	8·5	89·7	6·0	82·6	4·7
30	85·0	*3·1*			89·0	6·9	83·0	6·9	91·9	*15·5*	86·3	13·3	84·7	15·2	80·0	14·0	83·8	*7·4*	89·3	9·1	85·2	4·3	95·2	4·3
31	85·7	4·0			83·8	6·3			89·7	15·4			80·7	14·9	78·4	13·0			85·4	7·9			*97·4*	5·7
Mean*	87·6	5·9	80·8	4·1	83·5	5·4	83·5	7·3	83·1	10·4	85·5	12·4	85·7	13·5	80·4	14·5	85·2	11·6	88·7	10·2	85·7	7·7	87·9	7·1

* Mean of the column.

RELATIVE HUMIDITY

Monthly and annual means of values at exact hours, G.M.T.

97 ESKDALEMUIR: h_t = 0·9 m.

	Hour G.M.T. 0	1	2	3	4	5	6	7	8	9	10	11	Noon	13	14	15	16	17	18	19	20	21	22	23	24	Mean*
	per cent.																									
Jan.	88·4	88·4	88·1	87·7	87·5	87·2	88·5	87·7	88·0	88·2	87·8	86·7	85·2	*85·2*	85·5	87·0	87·4	88·5	*89·3*	89·1	88·4	88·5	87·5	87·5	87·7	87·6
Feb.	82·4	82·9	83·4	83·4	83·7	*84·6*	84·3	83·9	83·1	82·4	80·7	78·7	77·0	76·1	*75·9*	76·4	77·3	77·9	79·3	80·3	81·4	81·0	80·8	81·3	82·4	80·8
Mar.	84·9	85·5	86·7	85·9	86·4	86·5	*87·3*	87·2	86·1	84·2	82·0	82·1	80·4	77·9	78·7	*77·8*	78·1	79·7	81·9	84·1	84·5	85·3	85·8	85·9	85·5	83·5
Apr.	90·3	89·8	88·9	*90·7*	89·4	89·9	89·8	87·6	83·5	82·3	76·5	75·5	76·8	75·7	*73·7*	74·3	74·9	78·1	79·1	83·9	86·9	87·4	89·1	89·7	90·4	83·5
May	91·2	90·1	90·5	91·1	*91·3*	90·5	89·7	87·5	83·2	81·0	78·5	73·9	75·7	73·2	72·7	73·8	*72·3*	74·5	78·3	81·7	85·4	87·3	89·4	91·1	91·2	83·1
June	91·9	92·8	93·7	93·7	*94·0*	93·0	92·6	90·2	86·7	82·3	79·4	78·7	77·6	77·7	75·9	*75·2*	77·1	78·6	80·3	83·7	86·6	88·3	90·2	91·0	92·0	85·5
July	92·9	93·1	*94·1*	93·2	93·6	94·1	93·5	90·5	87·3	84·3	79·9	77·3	77·2	*76·1*	76·2	76·2	76·3	77·2	79·7	82·9	86·7	90·5	92·0	92·1	92·7	85·7
Aug.	93·1	93·7	93·5	93·9	93·6	*94·7*	94·0	90·1	82·4	73·7	68·8	66·0	64·3	62·4	*61·5*	62·5	63·3	66·8	73·1	79·9	85·5	88·4	91·9	92·5	92·9	80·4
Sept.	90·6	92·0	90·0	90·5	91·6	*92·6*	91·2	90·7	86·5	83·8	80·3	76·1	75·2	*74·6*	74·8	77·2	79·4	80·8	82·0	85·9	87·1	90·7	89·7	91·1	90·6	85·2
Oct.	92·7	*93·1*	92·5	92·5	91·9	91·5	91·9	92·3	91·7	90·9	88·1	83·6	81·5	*78·9*	79·8	79·6	83·0	85·8	88·6	90·5	91·5	91·8	92·2	92·4	93·0	88·7
Nov.	*89·0*	88·9	88·0	88·0	88·1	88·7	87·6	87·6	87·6	86·6	84·2	82·9	80·8	80·6	*80·3*	81·3	82·8	84·6	85·1	85·1	86·8	86·8	88·2	88·0	88·8	85·7
Dec.	89·7	*90·2*	89·9	89·3	90·1	89·7	89·1	89·1	89·5	89·6	87·5	85·9	84·9	*84·0*	85·0	85·7	86·1	86·0	86·9	87·8	87·9	87·9	89·2	88·9	89·8	87·9
Annual	89·8	90·1	89·9	90·0	90·1	*90·3*	90·0	88·7	86·3	84·1	81·2	78·9	78·1	76·9	*76·7*	77·3	78·2	79·9	82·0	84·6	86·6	87·9	88·9	89·3	89·8	84·8

VAPOUR PRESSURE

Monthly and annual means of values at exact hours, G.M.T., computed from corresponding mean values of temperature and relative humidity

98 ESKDALEMUIR: h_t = 0·9 m.

	Hour G.M.T. 0	1	2	3	4	5	6	7	8	9	10	11	Noon	13	14	15	16	17	18	19	20	21	22	23	24	Mean*
	millibars																									
Jan.	5·7	5·7	5·6	5·6	5·6	*5·6*	5·7	5·7	5·7	5·7	5·9	5·9	6·0	6·0	6·1	*6·1*	6·0	6·0	5·9	5·8	5·8	5·7	5·6	5·6	5·6	5·8
Feb.	3·9	3·8	3·8	3·9	3·9	4·0	3·9	3·9	3·9	4·0	4·1	4·3	4·3	*4·3*	4·3	4·3	4·2	4·2	4·0	4·0	3·9	3·9	3·9	*3·8*	3·8	4·0
Mar.	4·9	4·9	4·9	4·8	4·8	4·8	*4·8*	4·8	4·8	5·1	5·3	5·6	5·7	5·6	*5·7*	5·5	5·5	5·4	5·2	5·2	5·1	5·2	5·2	5·1	4·9	5·1
Apr.	6·9	6·8	6·7	6·8	6·8	*6·7*	6·8	7·1	7·3	7·6	7·5	7·6	7·8	7·8	*7·9*	7·8	7·7	7·7	7·5	7·4	7·3	7·1	7·1	7·0	7·0	7·3
May	9·2	9·4	8·9	8·9	*8·8*	8·9	9·4	10·1	10·4	10·7	11·2	11·0	11·5	11·5	*11·6*	11·5	11·0	10·8	10·7	10·7	10·2	9·9	9·8	9·7	9·5	10·3
June	11·8	11·7	11·6	11·4	*11·4*	11·4	11·7	12·0	12·3	12·3	12·3	12·6	12·7	12·8	12·7	12·7	*12·9*	12·8	12·7	12·7	12·4	12·0	11·9	11·8	11·7	12·2
July	12·7	12·5	12·3	12·2	*12·1*	12·4	12·8	13·2	13·5	13·7	13·7	13·8	14·0	14·1	14·2	14·2	*14·3*	14·2	14·1	13·9	13·6	13·2	13·1	12·8	12·7	13·4
Aug.	13·1	12·7	12·4	12·1	*12·0*	12·0	12·3	12·6	14·7	15·1	15·0	15·3	15·4	15·5	15·6	15·7	15·8	16·2	*16·3*	15·6	14·9	14·4	14·1	13·5	13·0	14·5
Sept.	10·5	10·7	10·4	10·4	10·5	10·6	*10·4*	10·6	11·1	11·8	12·2	12·1	12·4	12·3	12·3	12·5	*12·5*	12·5	11·9	11·6	11·1	11·2	10·8	10·9	10·5	11·4
Oct.	9·8	9·7	9·7	9·5	9·5	*9·5*	9·5	9·5	9·7	10·2	10·4	10·4	10·5	10·5	10·5	10·6	*10·8*	10·5	10·2	10·1	10·0	9·9	9·9	9·8	9·7	10·0
Nov.	7·1	7·1	7·0	7·0	7·0	7·0	6·9	6·9	7·0	7·3	7·5	7·7	*7·8*	7·7	7·6	7·6	7·3	7·2	7·0	6·9	7·0	6·9	6·9	*6·8*	6·9	7·2
Dec.	6·8	6·8	6·7	6·7	6·8	6·9	6·8	*6·7*	6·8	6·8	7·0	7·2	7·3	*7·3*	7·3	7·2	7·1	6·9	7·0	7·0	6·9	6·9	7·0	7·0	7·0	7·0
Annual	8·1	8·0	7·9	7·9	7·9	*7·9*	8·0	8·2	8·4	8·7	8·8	9·0	9·1	9·1	*9·2*	9·1	9·0	9·0	8·8	8·7	8·5	8·4	8·3	8·2	8·1	8·5

* Mean of values, 1,2,·····23, ½(0 + 24).

RAINFALL

Amount in millimetres, duration in hours and maximum rate of fall for each day 0h. to 24h., G.M.T.

99 ESKDALEMUIR: h_r(height of receiving surface above M.S.L.) = height of station above M.S.L. + height of receiving surface above ground = 24·1 m. + 0·6 m.

	JANUARY			FEBRUARY			MARCH			APRIL			MAY			JUNE		
	Amount	Duration	Max. rate	Amount	Duration	Max. rate	Amount	Duration	Max. rate	Amount	Duration	Max. rate	Amount	Duration	Max. rate	Amount	Duration	Max. rate
	mm.	hr.	mm./hr.	mm.	hr.	mm./hr.	mm.	hr.	mm./hr.	mm.	hr.	mm./hr.	mm.	hr.	mm./hr.	mm.	hr.	mm./hr.
1	9·3	5·1	2	...	...	...	...	...	...	0·2	0·2	1	3·6	2·9	11	0·5	1·3	1
2	0·5	0·3	3	0·4	1·4	1	...	...	...	...	...	...	2·0	1·8	6	...	...	...
3	9·7	11·2	4	2·3	14·6	1	...	...	...	...	...	...	3·7	2·7	16	1·7	0·3	40
4	*25·3*	14·3	8	3·0	10·0	1	...	...	...	0·7	0·3	2	1·4	3·5	8	16·4	5·8	*85*
5	...	...	...	0·9	10·3	2	0·6	0·5	2	31·7	10·8	5	3·6	2·2	2	7·8	6·3	7
6	4·4	10·3	1	0·4	...	...	...	...	...	7·8	2·4	14	6·0	3·3	20	2·7	3·9	1
7	6·9	12·8	3	0·7	0·9	...	5·2	5·4	2	5·7	8·6	4	8·2	6·0	4	6·9	4·4	16
8	9·8	9·2	3	...	...	...	0·8	0·7	2	4·3	4·2	2	6·4	3·2	16	*30·7*	11·5	37
9	2·6	2·3	4	4·0	12·4	1	...	...	...	...	...	...	0·2	0·1	...	0·1	0·1	...
10	2·0	3·1	2	0·7	4·3	1	2·8	7·9	1	1·1	2·6	1	0·6	0·5	2	4·5	8·0	...
11	13·9	7·5	*21*	0·5	5·0	...	0·1	1·0	...	0·1	...	...	1·0	1·4	...	...	...	...
12	11·5	5·4	5	0·2	...	...	5·8	4·0	2	...	...	...	...	...	...	...	...	...
13	0·5	1·6	1	0·1	...	...	25·8	21·0	4	...	...	...	7·7	5·1	2	0·4	0·4	1
14	22·0	11·7	10	0·3	...	...	1·2	2·0	2	7·7	9·1	3	*16·7*	*8·2*	16	6·1	*21·1*	...
15	18·3	9·9	5	0·1	1·0	...	1·6	4·4	1	1·6	3·7	1	0·1	...	...	1·6	5·4	...
16	17·9	*14·9*	9	...	...	...	11·4	*23·1*	2	0·6	2·9	...	...	...	...	1·8	5·1	...
17	2·5	1·6	5	...	...	...	...	...	...	...	...	...	...	...	...	3·6	7·1	1
18	1·6	2·0	1	...	...	...	11·5	10·2	4	1·4	0·7	2	1·4	4·6	...	5·4	9·4	6
19	...	...	...	...	...	...	0·3	1·1	...	9·2	6·9	6	0·8	1·6	...	...	...	...
20	...	...	...	...	...	...	2·5	6·0	1	19·4	13·1	7	...	...	...	7·1	4·7	8
21	...	...	...	0·3	0·8	...	10·1	8·5	6	*37·5*	*16·5*	30	...	...	...	...	...	...
22	...	...	...	0·6	1·0	...	9·6	5·8	5	16·1	12·1	13	2·7	3·4	10	2·3	1·9	7
23	0·3	1·0	...	0·1	0·3	1	6·6	5·2	3	22·2	10·7	5	0·5	0·9	1	5·1	6·5	5
24	...	...	...	...	...	...	0·7	0·3	5	7·3	4·9	4	...	...	...	9·3	10·7	8
25	2·7	4·1	1	0·3	1·0	...	2·7	7·1	3	20·6	9·5	5	2·7	5·1	3	1·8	2·2	...
26	1·2	1·4	3	*13·8*	*19·5*	*3*	*26·0*	17·0	7	0·1	0·1	1	3·0	2·5	2	1·6	3·5	8
27	0·4	...	...	1·4	3·0	2	4·0	8·7	6	36·7	11·7	*35*	0·5	0·7	...	2·9	4·4	...
28	0·5	0·5	1	0·7	3·5	2	12·1	7·5	*16*	1·4	4·4	1	...	...	...	0·7	2·7	...
29	1·7	7·8	2				2·5	3·8	3	13·4	12·2	4	0·1	0·2	...	4·4	5·5	18
30	0·2	0·9	1				0·8	0·7	2	6·7	5·9	8	13·9	3·6	*46*	...	...	...
31	...	...	...				0·2	...	...				2·1	3·8	...			
Total	165·7	138·9	-	30·8	89·0	-	144·9	151·9	-	253·5	153·5	-	88·9	67·3	-	125·4	132·1	-

	JULY			AUGUST			SEPTEMBER			OCTOBER			NOVEMBER			DECEMBER		
	Amount	Duration	Max. rate	Amount	Duration	Max. rate	Amount	Duration	Max. rate	Amount	Duration	Max. rate	Amount	Duration	Max. rate	Amount	Duration	Max. rate
	mm.	hr.	mm./hr.	mm.	hr.	mm./hr.	mm.	hr.	mm./hr.	mm.	hr.	mm./hr.	mm.	hr.	mm./hr.	mm.	hr.	mm./hr.
1	...	...	...	...	...	...	...	...	...	...	...	...	10·3	10·4	11	...	...	...
2	0·6	1·5	...	*0·8*	*1·1*	*7*	...	...	...	...	...	...	21·0	13·3	12	...	...	...
3	1·8	4·0	7	...	...	...	...	...	...	...	...	...	...	...	...	1·3	1·8	...
4	8·8	5·9	16	...	...	...	...	...	...	0·1	...	...	...	...	...	0·5	1·0	...
5	3·5	2·2	22	...	...	...	0·6	0·5	5	0·1	...	...	...	...	...	6·3	8·2	...
6	3·8	2·9	9	...	...	...	0·1	1·0	...	0·2	0·2	...	0·3	1·4	...	1·4	2·5	...
7	7·8	5·1	62	...	...	...	6·9	6·9	7	0·2	0·3	...	3·2	8·2	...	...	...	...
8	15·8	8·6	27	...	...	...	0·7	0·4	15	5·0	3·1	11	25·7	16·4	6	7·4	8·4	...
9	1·0	0·8	13	...	...	...	*20·9*	13·3	*41*	3·5	4·7	10	6·0	4·8	8	0·2	1·0	...
10	3·2	6·5	13	...	...	...	2·1	5·0	2	0·1	0·1	...	2·9	2·8	4	...	...	...
11	1·0	3·7	6	...	...	...	14·6	*14·5*	26	*6·6*	*8·9*	7	28·8	17·8	12	0·6	0·8	...
12	0·1	1·0	...	...	...	...	1·7	1·7	13	0·7	1·2	...	0·7	2·7	...	...	...	...
13	1·5	5·7	5	...	...	...	5·0	4·9	7	4·7	3·1	*13*	1·8	1·0	8	1·0	2·7	...
14	0·2	1·5	...	...	...	...	18·7	10·2	11	0·1	0·1	...	5·7	4·0	...	0·2	0·1	...
15	...	...	...	...	...	...	8·9	7·4	5	1·8	5·9	...	0·2	1·0	...	...	...	...
16	22·6	4·3	*104*	...	...	...	2·3	4·1	20	...	...	...	...	...	...	...	...	...
17	0·1	0·7	...	...	...	...	1·0	0·5	13	0·8	1·7	...	...	...	...	...	...	...
18	0·7	1·0	4	...	...	...	...	...	...	1·7	6·0	...	...	...	...	...	...	...
19	...	...	...	...	...	...	2·6	1·5	12	...	...	...	1·4	0·8	3	...	...	...
20	...	...	...	...	...	...	2·6	1·4	23	...	...	...	27·0	*19·0*	25	...	...	...
21	7·0	7·7	17	...	...	...	6·4	5·2	8	...	...	...	*40·6*	16·4	27	...	...	...
22	0·1	0·8	...	...	...	...	18·9	4·9	15	1·6	2·8	...	31·1	12·7	22	0·2	0·9	...
23	0·2	1·3	...	...	...	...	...	...	...	0·1	0·1	...	14·9	8·4	*32*	0·5	4·1	...
24	0·7	1·8	4	...	...	...	0·3	0·4	...	1·0	2·5	...	1·5	1·4	5	7·1	9·1	...
25	1·4	3·8	8	...	...	...	0·1	0·1	...	...	...	...	...	...	...	8·7	4·2	15
26	*23·0*	*19·4*	16	...	...	...	...	...	...	...	...	...	...	...	...	8·7	4·0	...
27	9·1	7·7	10	...	...	...	1·9	3·7	...	0·2	1·9	...	...	...	...	*14·6*	*9·9*	*20*
28	0·1	1·0	...	...	...	...	0·3	0·3	...	0·3	0·9	...	2·4	2·3	...	6·5	6·1	...
29	0·1	0·5	...				0·6	0·7	...	0·9	2·7	...	2·5	4·2	...	1·1	2·4	...
30	...	...	...				...	...	...	1·9	4·0	...	...	...	...	1·5	2·2	...
31	...	...	...							0·1	0·2	...				2·2	2·5	...
Total	114·2	99·4	-	0·8	1·1	-	117·2	88·6	-	31·7	50·4	-	228·0	149·0	-	70·0	71·9	-

RAINFALL

Monthly and annual totals of amounts in sixty-minute periods between exact hours, G.M.T.

100 ESKDALEMUIR: h_r = 242·0 m. + 0·4 m.

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	0-24
	millimetres																								
Jan.	4·7	5·1	2·6	4·5	2·4	3·1	3·8	6·2	8·0	7·4	3·3	5·1	5·8	11·7	11·1	*13·4*	10·3	9·9	10·7	10·0	10·1	5·7	6·2	4·5	165·7
Feb.	2·0	*3·2*	2·2	1·1	1·0	1·2	1·1	1·2	1·8	0·2	0·6	1·2	1·7	1·4	0·8	1·5	1·0	1·1	1·6	1·1	1·4	0·5	0·6	1·3	30·8
Mar.	5·4	2·5	2·2	7·7	8·4	5·7	5·7	4·8	8·2	9·2	9·0	*10·5*	10·2	8·6	10·0	5·6	3·5	2·1	2·2	2·7	5·1	2·1	5·5	8·0	144·9
Apr.	4·5	3·5	8·7	9·9	6·0	7·7	7·5	10·7	14·6	19·2	14·7	15·8	*22·6*	15·1	15·2	16·4	8·5	9·3	11·6	7·2	6·2	9·0	6·9	2·7	253·5
May	1·3	2·9	1·0	0·8	1·1	6·5	10·0	7·7	3·2	5·4	2·8	3·9	2·1	0·4	1·2	7·1	*10·9*	10·4	1·5	2·0	2·4	1·1	3·1	0·1	88·9
June	*10·8*	5·8	6·9	5·0	3·6	4·5	7·4	6·6	3·4	4·2	6·6	3·4	3·6	1·6	2·7	5·9	7·7	6·1	8·1	6·3	5·1	4·4	2·2	3·5	125·4
July	6·9	2·6	4·6	4·7	3·1	7·1	4·2	3·5	4·5	3·4	2·7	*15·7*	8·1	5·6	7·0	4·8	1·9	3·2	3·3	3·1	2·9	3·2	4·6	3·5	114·2
Aug.	...	...	0·1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·1	0·1	0·2	*0·3*	...	...	...	0·8
Sept.	2·5	5·9	5·2	4·5	6·8	5·4	3·4	2·5	2·7	0·7	3·1	1·4	2·5	10·1	13·4	10·5	*15·6*	7·5	4·9	1·6	1·4	2·3	1·1	2·2	117·2
Oct.	1·2	2·3	*4·8*	3·2	1·9	0·4	0·7	0·7	1·5	1·1	1·6	0·8	1·2	0·7	0·4	0·2	0·7	1·1	1·2	1·2	1·9	1·4	0·8	0·7	31·7
Nov.	4·6	8·8	4·4	8·4	10·2	11·1	10·8	6·8	10·4	16·4	15·0	*17·8*	7·9	8·3	4·3	6·0	8·3	7·8	6·5	6·5	13·4	13·5	10·4	10·4	228·0
Dec.	1·8	5·7	*6·2*	4·5	5·3	3·5	5·5	3·3	3·5	0·3	1·1	2·3	1·0	2·0	2·1	1·8	3·1	0·8	3·6	4·0	2·3	0·7	3·6	2·0	70·0
Annual	45·7	48·3	48·9	54·3	49·8	56·2	60·1	54·0	61·8	67·5	60·5	*77·9*	66·7	65·5	68·2	73·2	71·5	59·4	55·3	45·9	52·6	43·9	45·0	*38·9*	1371·1

RAINFALL

Monthly and annual totals of durations in sixty-minute periods between exact hours, G.M.T.

101 ESKDALEMUIR: h_r = 242·0 m. + 0·4 m.

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	0-24
	hours																								
Jan.	4·6	3·2	1·3	2·3	2·6	3·4	4·2	7·1	8·1	7·1	5·2	5·3	6·5	*9·8*	9·3	8·4	6·0	6·0	8·2	6·1	6·6	5·4	5·4	6·8	138·9
Feb.	5·0	5·0	3·0	2·0	2·0	3·3	2·0	*6·0*	5·5	2·0	2·2	3·3	5·0	*6·0*	3·6	3·3	2·0	2·0	3·0	5·0	5·0	4·4	3·6	4·8	89·0
Mar.	7·7	4·2	6·6	6·9	7·0	8·4	*9·1*	8·8	8·5	7·0	8·1	7·2	5·7	5·2	6·8	5·5	3·4	4·3	3·4	5·0	6·0	3·2	5·1	8·8	151·9
Apr.	3·5	5·4	*8·4*	8·2	6·8	7·6	6·9	7·3	6·6	8·3	7·5	8·2	8·2	7·7	7·7	7·4	5·3	4·8	5·1	4·2	4·1	5·0	4·6	4·7	153·5
May	1·9	2·3	1·2	1·9	2·5	5·1	*6·9*	5·1	5·3	5·3	4·0	2·9	1·1	0·1	1·0	2·2	3·7	2·9	1·0	2·9	3·4	1·7	2·6	0·3	67·3
June	6·7	9·0	*10·2*	7·9	6·7	7·0	6·3	6·5	7·4	4·3	4·8	2·8	3·8	1·8	3·0	3·5	3·8	4·0	7·2	6·7	4·7	4·7	4·0	5·3	132·1
July	5·8	4·1	3·9	5·5	4·8	*9·0*	5·8	6·7	4·0	3·5	2·1	3·4	3·3	4·4	2·9	3·0	2·4	2·0	2·5	3·5	3·1	3·6	4·9	5·2	99·4
Aug.	...	...	0·1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·1	0·1	*0·5*	0·3	...	...	...	1·1
Sept.	3·9	4·7	5·6	*5·8*	5·3	5·4	3·1	3·1	2·5	1·4	2·5	1·9	2·9	5·6	5·6	4·5	5·5	4·7	2·2	2·1	2·8	2·7	1·8	3·0	88·6
Oct.	2·4	1·7	*4·5*	3·2	2·4	1·6	1·6	3·0	2·5	2·5	1·2	0·8	2·8	1·9	0·9	0·4	1·4	2·3	2·5	2·6	1·7	2·2	2·3	2·9	50·4
Nov.	6·5	7·1	5·6	*9·6*	7·1	6·0	6·8	8·6	8·4	6·4	6·7	7·4	6·3	6·0	4·3	4·0	3·8	3·7	4·8	4·1	5·9	5·8	7·0	7·1	149·0
Dec.	2·9	*6·1*	4·3	4·4	5·2	*6·1*	3·3	4·2	2·9	0·2	1·3	2·8	1·1	2·0	1·5	1·6	2·4	2·5	2·4	3·1	1·7	1·5	4·8	3·6	71·9
Annual	50·9	52·8	54·7	57·7	52·4	62·9	56·0	*66·4*	61·7	48·0	45·6	46·0	46·7	49·6	46·6	43·8	39·7	*39·3*	42·4	45·8	45·3	40·2	46·1	52·5	1193·1

NOTES ON RAINFALL

102 ESKDALEMUIR

Dry Periods

The following definitions are adopted by the British Rainfall Organization
An "absolute drought" is a period of at least 15 consecutive days to none of which is credited 0·2 mm. of rain or more
A "partial drought" is a period of at least 29 consecutive days, the mean daily rainfall of which does not exceed 0·2 mm.
A "dry spell" is a period of at least 15 consecutive days to none of which is credited 1·0 mm. of rain or more

"Absolute drought": August 3–September 4
"Partial drought": July 28–September 6
"Dry spell": July 28–September 6. In these 41 days only 1·7 mm. of rain fell

Wet Periods

The following definitions are adopted by the British Rainfall Organization
A "rain spell" is a period of at least 15 consecutive days to each of which is credited 0·2 mm. of rain or more
A "wet spell" is a period of at least 15 consecutive days to each of which is credited 1·0 mm. of rain or more

"Rain spell": March 18–April 1 and April 27–May 11
"Wet spell": No occasions

Rainfall Duration

Hours	0·1–1·0	1·1–2·0	2·1–6·0	6·1–12·0	>12·0
Number of days	57	26	87	46	23

There were 126 days on which no duration of rainfall was registered
The day with the greatest duration was March 16, when the duration was 23·1 hr., the amount falling being 11·4 mm.
The longest continuous fall, (25·0 hr.), occurred on March 12–13, 31·6 mm. being recorded
There were 8 continuous falls of 12 hours or more

Notable Falls of the Year

The greatest amount in a 60-min. period was 12·3 mm. between 11h. and 12h. on July 16, of which 11 mm. fell in 25 min.
Falls of 5 mm. in 1 hr. occurred on 15 days.

Details of the greatest continuous falls are as follows

	November 21	March 12–13	April 21–22	January 3–4	November 20	November 11–12
Amount (mm.)	39	32	28	29	23	20
Duration of rainfall (hr.)	14·4	25·0	12·8	18·6	14·9	13·1

Rate of Rainfall (Jardi recorder)

The highest instantaneous rate of rainfall recorded was 104 mm./hr. at 11h. 30m. on July 16. The maximum rate exceeded 50 mm./hr. on June 4, July 7 and 16.

DURATION OF BRIGHT SUNSHINE AND PERCENTAGE OF POSSIBLE FOR EACH DAY

103 ESKDALEMUIR: h_s(height of recorder above ground) = 1·5 m.

	JANUARY		FEBRUARY		MARCH		APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER		OCTOBER		NOVEMBER		DECEMBER	
	Duration	Per cent. of possible	Duration	Per cent. of possible	Duration	Per cent. of possible	Duration	Per cent. of possible	Duration	Per cent. of possible	Duration	Per cent. of possible	Duration	Per cent. of possible	Duration	Per cent. of possible	Duration	Per cent. of possible	Duration	Per cent. of possible	Duration	Per cent. of possible	Duration	Per cent. of possible
	hr.	%	hr.	%	hr.	%	hr.	%	hr.	%	hr.	%	hr.	%	hr.	%	hr.	%	hr.	%	hr.	%	hr.	%
1	···	···	1·6	19	9·3	*88*	2·3	18	8·5	56	*10·7*	*63*	7·0	41	6·3	39	*9·9*	*72*	1·5	12	···	···	···	···
2	4·4	62	···	···	8·7	82	2·4	18	7·8	51	9·7	51	···	···	2·5	16	5·7	41	0·3	3	···	···	*4·5*	*61*
3	···	···	···	···	8·8	82	6·5	50	···	···	4·4	25	2·3	13	···	···	4·0	29	3·6	32	···	···	···	···
4	···	···	···	···	8·4	78	0·3	2	···	···	0·6	4	0·1	···	4·6	29	···	···	*9·4*	*84*	2·5	28	···	···
5	0·6	8	···	···	1·2	11	···	···	3·9	28	···	···	10·7	62	7·0	45	4·2	31	1·5	13	*7·8*	*87*	···	···
6	···	···	0·1	1	8·1	74	4·3	32	2·9	19	1·1	6	4·9	29	4·0	26	2·1	15	0·8	7	1·1	12	0·1	1
7	···	···	0·4	4	1·8	16	0·5	4	···	···	4·0	20	3·9	29	3·5	22	···	···	···	···	···	···	0·5	7
8	···	···	···	···	···	···	···	···	0·5	3	3·2	17	1·9	11	1·8	12	4·1	31	1·0	9	···	···	···	···
9	···	···	···	···	9·0	80	4·2	31	5·8	37	10·2	59	5·4	37	8·4	54	···	···	0·2	2	0·9	11	4·1	57
10	···	···	···	···	···	···	0·1	1	4·7	30	···	···	0·7	4	10·9	71	4·2	32	0·8	7	5·1	58	···	···
11	···	···	···	···	0·1	1	5·5	48	5·8	37	5·0	29	···	···	8·6	56	0·3	2	···	···	···	···	···	···
12	2·6	35	···	···	0·1	1	6·3	46	5·7	36	3·5	20	4·4	26	7·2	47	0·4	3	···	···	1·2	14	0·1	1
13	2·8	37	0·8	9	···	···	4·9	38	···	···	···	···	1·8	10	12·0	79	6·9	53	6·7	57	7·0	82	···	···
14	···	···	···	···	*9·4*	81	3·5	25	1·3	8	···	···	4·3	25	12·2	81	···	···	4·7	44	3·8	45	···	···
15	···	···	···	···	4·1	35	···	···	7·4	45	3·7	21	5·3	31	11·6	77	0·5	4	···	···	7·1	85	···	···
16	···	···	8·1	84	···	···	···	···	11·7	73	5·5	30	0·2	1	*13·0*	*87*	···	···	2·1	20	6·0	72	···	···
17	0·1	1	0·3	3	1·3	11	*12·4*	*87*	10·3	64	···	···	1·1	7	5·4	36	4·3	34	···	···	7·0	85	1·0	14
18	···	···	4·9	50	···	···	0·2	1	···	···	3·4	19	0·4	2	12·0	81	3·8	30	···	···	4·8	59	0·1	1
19	3·7	47	*8·4*	*86*	···	···	6·4	45	···	···	8·4	48	*13·0*	*78*	12·1	82	···	···	···	···	0·3	4	0·2	3
20	*5·4*	*68*	4·4	44	···	···	···	···	10·4	63	3·0	17	8·6	52	9·1	62	1·0	8	7·4	73	···	···	4·2	60
21	1·3	18	0·7	7	···	···	···	···	6·7	41	5·1	29	1·7	10	11·1	76	8·4	68	8·3	82	···	···	0·2	3
22	1·3	16	5·3	53	···	···	···	···	0·1	1	2·2	12	6·7	41	9·1	63	0·8	7	···	···	···	···	0·1	1
23	1·4	17	7·7	76	···	···	0·2	1	7·4	45	···	···	3·9	24	11·4	79	5·8	48	3·5	36	0·6	8	0·1	1
24	2·7	33	7·2	72	7·1	57	7·8	53	3·1	19	···	···	6·8	41	11·8	82	5·4	45	···	···	3·9	50	···	···
25	0·1	1	4·6	45	1·1	9	···	···	3·4	20	7·5	43	3·5	21	8·0	55	0·3	2	4·1	42	5·5	71	···	···
26	···	···	···	···	···	···	3·5	24	5·7	34	4·5	26	···	···	7·5	53	7·2	60	···	···	6·7	*87*	1·9	27
27	···	···	4·1	39	0·2	2	0·7	5	5·1	30	3·6	21	···	···	12·1	85	0·6	5	···	···	6·6	85	0·2	3
28	0·1	1	3·3	31	···	···	8·9	59	*12·7*	*76*	3·9	22	2·8	17	10·3	73	6·7	57	···	···	4·2	55	1·7	24
29	···	···			···	···	···	···	8·8	52	1·3	7	3·0	19	10·6	76	5·7	49	0·5	5	2·7	36	4·0	57
30	···	···			···	···	5·9	39	3·3	20	0·3	2	3·2	20	6·7	48	1·5	13	···	···	2·7	36	3·0	42
31	···	···			···	···			6·6	39			7·4	46	9·0	65			···	···			···	···
Mean	0·85	11	2·21	22	2·54	23	2·90	21	4·83	30	3·50	20	3·77	23	8·38	57	3·13	25	1·82	17	2·92	36	0·83	12
											Annual mean		3·15	26										

DURATION OF BRIGHT SUNSHINE

Monthly and annual totals between exact hours, local apparent time

104 ESKDALEMUIR: h_s = 1·5 m.

	Hour L.A.T. 3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	Total	Per cent. of possible
	hours																			%
Jan.	–	–	–	–	···	···	1·4	3·9	5·3	5·0	*6·3*	3·6	1·0	···	–	–	–	–	26·5	11
Feb.	–	–	–	···	0·4	5·0	7·3	8·4	8·6	*10·0*	9·0	6·8	5·5	0·9	···	–	–	–	61·9	22
Mar.	–	–	···	0·1	2·9	7·7	9·0	8·7	9·2	9·3	*10·3*	8·6	7·2	5·0	0·7	···	–	–	78·7	23
Apr.	–	···	0·4	1·6	4·4	7·2	*10·1*	9·8	8·7	8·9	9·9	9·2	7·2	6·7	3·3	0·6	···	–	88·0	21
May	···	···	1·8	6·1	9·8	10·7	13·3	12·6	13·4	13·0	13·2	*14·9*	13·0	10·6	10·6	6·1	0·5	···	149·6	30
June	···	···	1·6	3·0	4·6	7·4	8·8	*9·9*	9·4	7·4	9·2	9·6	8·8	8·1	7·4	8·1	1·6	···	104·9	20
July	···	0·3	3·7	5·0	6·4	7·5	10·6	10·0	*10·8*	10·3	9·7	8·8	10·3	9·4	7·3	6·3	0·6	···	117·0	23
Aug.	–	···	1·5	12·5	19·6	*23·4*	21·4	*23·4*	22·9	22·6	22·7	21·9	22·3	23·1	18·4	4·1	···	–	259·8	57
Sept.	–	–	···	0·7	6·7	8·6	11·0	12·8	*12·9*	9·9	8·3	9·1	6·1	5·8	1·9	···	–	–	93·8	25
Oct.	–	–	–	···	0·5	2·1	4·4	6·4	8·4	*9·1*	7·7	8·8	6·8	2·2	···	–	–	–	56·4	17
Nov.	–	–	–	–	···	6·2	11·7	13·6	*15·1*	*15·1*	12·3	10·5	3·0	···	–	–	–	–	87·5	36
Dec.	–	–	–	–	–	0·3	1·7	5·5	*6·1*	*6·1*	4·0	2·2	···	–	–	–	–	–	25·9	12
Annual	···	0·3	9·0	29·0	55·3	86·1	110·7	125·0	*130·8*	126·7	122·6	114·0	91·2	71·8	49·6	25·2	2·7	···	1150·0	26

Mean speed and highest instantaneous speed recorded each day (0h. to 24h., G.M.T.) by the pressure-tube anemograph

105 ESKDALEMUIR: h_a(height of anemograph above M.S.L.) = height of ground above M.S.L. + height of anemograph above ground = 235 m. + 15 m.

	JANUARY		FEBRUARY		MARCH		APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER		OCTOBER		NOVEMBER		DECEMBER	
	Mean	Max. gust	Mean	Max. gust	Mean	Max. gust	Mean	Max. gust	Mean	Max. gust	Mean	Max. gust	Mean	Max. gust	Mean	Max. gust	Mean	Max. gust	Mean	Max. gust	Mean	Max. gust	Mean	Max. gust
	metres per second																							
1	4·7	15	4·7	18	5·4	15	3·4	13	7·1	22	2·7	11	2·4	10	2·7	9	1·7	7	3·2	12	7·1	22	0·3	3
2	3·2	18	*9·8*	*24*	1·4	10	*1·1*	9	7·1	19	*1·1*	8	4·3	10	3·1	13	1·5	7	*0·1*	5	9·2	21	1·5	5
3	7·6	19	9·5	23	*0·1*	1	1·8	10	*8·3*	*25*	3·4	14	6·0	17	1·7	6	1·7	10	2·2	10	*9·7*	19	3·6	10
4	3·0	14	8·7	15	2·2	12	1·8	11	4·7	14	4·0	13	5·7	15	*0·8*	6	1·8	9	1·1	8	5·7	17	2·7	10
5	6·2	22	3·0	7	4·2	13	8·3	29	6·5	16	4·6	17	*6·7*	*26*	2·2	12	3·5	12	1·3	9	2·0	11	6·6	19
6	8·5	27	1·3	5	0·7	7	9·4	24	3·4	14	5·7	16	5·4	13	2·6	11	1·9	10	0·9	10	*0·7*	6	2·5	16
7	7·3	17	4·5	16	2·2	10	9·9	25	2·3	11	6·0	19	6·5	20	1·6	9	2·5	13	0·5	5	3·7	12	0·4	3
8	8·6	20	7·6	18	2·3	11	3·4	14	3·0	14	*9·1*	*22*	2·2	9	3·3	11	3·9	15	5·1	14	8·4	20	2·0	9
9	3·0	9	8·0	17	1·7	7	2·7	13	2·8	15	6·0	20	1·8	9	2·5	10	*10·7*	25	5·6	15	6·8	19	1·1	8
10	3·5	13	7·3	21	6·8	17	4·3	14	2·9	11	3·1	12	1·9	11	1·5	6	7·1	20	4·3	11	4·9	19	2·6	10
11	5·1	13	6·5	14	5·8	18	5·9	17	3·6	11	2·3	11	2·4	10	1·7	11	9·3	21	8·8	21	1·5	10	4·5	13
12	4·8	23	4·8	12	5·2	16	1·9	10	3·0	10	2·4	10	3·4	14	0·9	6	5·1	17	*10·6*	*23*	6·6	21	3·1	20
13	5·2	21	3·3	10	*7·9*	14	5·2	17	1·6	10	2·1	8	3·3	13	1·6	7	2·4	12	2·1	17	5·8	20	*0·2*	5
14	5·7	25	4·6	11	4·9	15	8·5	21	4·4	16	3·0	10	2·5	12	1·0	6	6·7	25	2·8	12	1·5	12	1·1	8
15	*11·5*	*28*	4·4	13	2·4	13	7·1	20	5·8	16	4·2	15	1·7	11	1·3	5	9·4	21	6·9	21	5·7	23	1·1	6
16	3·5	14	2·5	10	4·5	21	7·0	19	2·0	9	4·2	14	0·9	9	2·6	9	4·8	24	1·7	15	4·1	13	1·4	6
17	7·2	18	3·8	13	3·2	16	1·5	9	2·0	11	5·5	18	0·6	7	4·1	15	1·6	10	1·4	9	3·2	13	2·1	9
18	3·1	18	4·9	16	7·3	*23*	3·1	12	2·8	15	3·7	15	2·7	9	2·7	9	2·6	9	0·5	5	0·9	5	1·9	9
19	1·0	6	5·1	15	5·6	14	7·4	24	*1·2*	8	4·3	13	4·1	15	2·0	9	2·7	9	2·4	10	1·5	9	4·5	21
20	1·2	6	5·8	16	1·3	11	12·7	27	1·5	9	3·3	14	4·0	12	3·1	10	2·4	11	0·6	6	7·9	*23*	3·2	17
21	*0·5*	3	6·0	16	6·1	20	*13·8*	*31*	1·9	8	3·3	12	4·1	14	*5·7*	*16*	4·5	21	0·5	5	7·7	18	6·3	*27*
22	1·7	7	4·0	14	6·3	19	10·7	25	1·3	7	1·5	9	3·9	13	4·2	13	8·4	*27*	3·0	11	4·6	15	*8·0*	26
23	2·1	11	*0·6*	6	1·1	5	9·0	29	4·0	13	4·7	14	4·2	14	2·3	7	4·9	18	1·0	7	6·6	23	6·1	22
24	2·5	12	0·8	9	4·5	16	9·1	27	5·0	16	4·0	11	4·1	12	2·4	9	*0·7*	8	3·2	11	7·4	21	7·1	21
25	5·6	17	1·3	13	6·7	17	8·9	29	2·1	9	4·1	13	0·3	5	2·4	7	1·0	9	3·4	13	7·4	22	6·3	19
26	5·7	17	5·8	13	6·5	21	8·0	21	4·3	15	3·0	13	2·7	10	1·7	7	0·7	8	2·4	12	5·8	19	6·8	24
27	2·6	10	5·7	15	2·2	8	10·3	24	5·2	13	2·7	9	4·0	13	1·2	5	4·8	18	3·2	10	3·8	15	6·1	25
28	2·3	11	6·2	18	1·6	5	10·2	26	1·8	11	2·7	12	3·4	10	1·1	4	5·6	23	2·9	11	1·8	11	3·6	17
29	1·8	12			4·3	16	5·4	27	2·6	14	4·0	13	2·5	11	1·3	6	4·2	17	4·3	17	3·9	12	3·6	19
30	1·6	8			6·5	19	5·9	19	2·7	12	2·0	9	*0·4*	3	1·8	7	1·7	11	4·3	15	1·3	7	0·8	8
31	2·1	7			4·8	15			2·9	10			1·8	9	1·3	5			0·7	5			2·0	10

WIND

Monthly and annual means of mean wind speed between exact hours, G.M.T.

106 ESKDALEMUIR: h_a = 235 m. + 15 m.

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	metres per second																								
Jan.	4·6	4·5	4·1	4·0	4·4	4·2	4·2	4·3	4·3	3·7	*3·6*	4·1	4·1	4·2	4·4	4·4	4·2	4·4	4·2	4·1	4·3	*4·8*	4·8	4·6	4·4
Feb.	*4·5*	4·6	4·6	4·9	4·9	4·7	5·1	5·2	4·9	5·0	5·1	5·5	*6·0*	5·9	5·5	5·5	5·2	4·7	4·6	4·7	4·8	4·9	4·9	4·8	5·0
Mar.	4·0	4·2	4·4	4·0	4·1	4·0	*3·6*	3·8	3·8	3·7	3·9	4·0	4·3	4·4	*4·7*	4·3	4·3	4·2	4·2	3·8	4·0	4·1	3·8	3·8	4·1
Apr.	5·4	5·4	5·5	5·4	5·2	5·3	5·8	6·6	7·4	7·9	8·3	8·1	8·4	9·0	*9·1*	8·8	8·1	7·3	6·2	5·4	4·9	*4·7*	4·9	4·9	6·6
May	2·4	2·5	2·5	2·4	2·3	2·5	3·0	3·6	4·0	4·6	4·6	4·9	4·7	5·1	*5·5*	5·0	4·6	4·4	4·0	3·1	2·4	2·2	2·2	*2·1*	3·5
June	2·6	2·6	2·5	2·5	2·5	2·7	2·9	3·2	3·8	4·5	5·0	5·2	5·5	*5·7*	5·3	5·2	5·0	4·7	4·5	3·7	3·0	2·6	2·6	*2·3*	3·8
July	2·2	1·9	*1·9*	2·0	*1·9*	2·0	2·4	2·9	3·4	3·5	4·0	4·4	*4·8*	4·8	4·5	4·5	4·4	4·3	4·2	3·5	2·8	2·5	2·2	2·2	3·2
Aug.	1·6	1·4	1·4	1·4	1·5	1·6	*1·3*	1·5	2·0	2·4	2·9	3·1	3·2	3·2	3·2	*3·2*	3·0	3·0	2·7	2·2	2·0	2·0	1·9	1·5	2·2
Sept.	3·1	3·0	3·0	2·4	*2·3*	2·5	2·7	3·0	3·6	4·5	5·2	5·7	6·1	*6·1*	5·9	5·9	5·6	5·1	4·0	3·5	3·1	2·8	3·1	3·3	4·0
Oct.	2·5	2·6	2·4	*2·3*	2·7	2·4	2·5	2·5	2·6	3·5	3·8	4·0	*4·0*	4·0	3·9	3·6	3·0	3·0	2·6	2·6	2·4	2·5	2·6	2·4	2·9
Nov.	4·4	4·5	4·8	4·7	4·7	4·8	4·9	5·0	5·4	5·4	5·8	*6·0*	5·9	5·8	5·7	5·2	4·7	4·5	4·4	4·2	4·3	4·3	4·2	*4·0*	4·9
Dec.	3·2	3·0	3·0	3·2	3·2	3·2	2·9	2·9	3·0	3·4	3·5	3·6	3·6	3·9	*4·1*	3·8	4·0	4·0	3·5	3·2	3·0	2·8	*2·8*	3·3	3·3
Annual	3·4	3·3	3·3	*3·2*	3·3	3·3	3·4	3·7	4·0	4·3	4·6	4·9	5·0	*5·1*	5·1	4·9	4·7	4·5	4·1	3·6	3·4	3·4	3·3	3·3	4·0

DISTRIBUTION OF WIND SPEED, EXTREME VELOCITIES AS RECORDED BY PRESSURE-TUBE ANEMOGRAPH

107 ESKDALEMUIR: h_a = 235 m. + 15 m.

	DISTRIBUTION OF WIND SPEED								EXTREME VELOCITIES				
	More than 17·1 m./sec.		10·8 to 17·1 m./sec.		5·5 to 10·7 m./sec.	1·6 to 5·4 m./sec.	Less than 1·6 m./sec.	No record	Highest hourly wind			Highest gust	
	Dates of occurrence	Duration	No. of days	Duration	Duration	Duration	Duration	Duration	Veer from N.	Speed	Hour ended	Speed	Date
		hr.		hr.	hr.	hr.	hr.	hr.	°	m./sec.	day h.	m./sec.	day h. m.
Jan.	15	3	7	28	211	325	177	0	210	17	15 6	28	15 5 50
Feb.	–	0	4	13	265	307	87	0	90	13	3 7	24	2 22 30
Mar.	–	0	4	9	245	291	199	0	90	13	18 8	23	18 7 40
Apr.	5, 21, 25	10	17	145	243	187	135	0	210	21	21 15	31	21 15 5
May	–	0	2	7	163	362	212	0	70	14	3 10	25	3 9 50
June	–	0	1	6	197	334	183	0	240	13	8 14	22	8 11 0
July	–	0	1	1	130	390	210	13	290	12	5 10	26	5 9 25
Aug.	–	0	0	0	26	423	293	2	70	9	21 11	16	21 11 50
Sept.	–	0	7	49	163	296	210	2	225	16	22 12	27	22 11 35
Oct.	–	0	3	18	116	323	287	0	210	14	12 6	23	12 4 5
Nov.	–	0	7	29	277	258	155	1	240	14	3 15	23	20 15 20
Dec.	–	0	3	11	165	299	269	0	310	14	22 18	27	21 14 5
Year	4	13	56	316	2201	3795	2417	18	210	21	Apr. 21 15	31	Apr. 21 15 5

TEMPERATURE IN THE GROUND AT DEPTHS OF 30 CM. (ft.) AND 122 CM. (4ft.) AT 9h., G.M.T.

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	JANUARY		FEBRUARY		MARCH		APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER		OCTOBER		NOVEMBER		DECEMBER	
	30 cm.	122 cm.	30 cm.	122 cm.	30 cm.	122 cm.	30 cm.	122 cm.	30 cm.	122 cm.	30 cm.	122 cm.	30 cm.	122 cm.	30 cm.	122 cm.	30 cm.	122 cm.	30 cm.	122 cm.	30 cm.	122 cm.	30 cm.	122 cm.
	degrees Absolute																							
1	76·1	78·9	75·1	78·0	74·5	77·2	77·0	76·9	79·2	78·8	86·7	81·6	88·0	83·8	89·0	85·1	89·3	86·6	83·6	85·1	81·5	83·1	75·8	81·2
2	76·1	78·9	75·0	78·1	74·4	77·1	77·1	77·1	79·3	78·8	87·5	81·8	88·4	84·1	89·2	85·1	89·2	86·5	84·0	85·0	82·1	83·1	75·3	81·0
3	76·0	78·7	75·1	78·1	74·4	77·1	76·8	77·2	79·3	78·8	88·2	81·9	88·0	84·1	88·9	85·1	89·1	86·7	84·3	85·0	82·2	83·1	75·0	80·8
4	76·5	78·6	75·1	77·9	74·3	77·1	76·8	77·2	79·1	78·8	88·2	82·1	88·0	84·7	88·8	85·2	88·8	86·5	84·0	85·0	81·8	83·1	75·2	80·6
5	76·8	78·7	75·0	77·9	74·4	77·1	76·7	77·2	79·1	78·8	87·5	82·3	87·5	84·0	89·2	85·4	88·5	86·4	84·0	85·0	81·3	83·1	75·2	80·5
6	76·2	78·8	75·0	77·8	74·3	77·1	76·1	77·0	79·5	78·8	86·8	82·6	87·0	84·0	89·8	85·3	88·0	86·7	84·1	84·9	80·7	83·1	75·1	80·5
7	76·0	78·7	75·0	77·9	74·3	77·1	76·9	77·1	80·2	78·9	85·9	82·8	86·9	84·6	89·0	85·4	87·4	86·4	84·0	84·8	81·0	83·1	75·3	80·4
8	75·9	78·6	75·0	77·7	74·3	77·1	77·0	77·1	80·9	79·0	85·3	82·6	86·9	83·0	88·8	85·5	87·1	86·4	84·0	84·6	81·3	83·1	75·4	80·3
9	75·7	78·3	74·9	77·6	74·2	77·1	77·0	77·1	81·0	79·0	85·0	82·6	86·7	84·0	88·6	85·4	87·2	86·3	84·2	84·7	82·1	83·0	75·5	80·1
10	75·8	78·5	74·9	77·5	74·1	77·0	77·2	77·1	81·7	79·1	85·0	82·8	86·7	84·0	89·0	85·4	86·8	86·2	84·2	84·7	82·0	83·0	75·4	79·8
11	75·7	78·5	74·9	77·5	74·1	76·9	77·9	77·1	82·4	79·2	85·2	82·8	86·5	84·0	89·1	85·4	86·8	86·2	84·5	84·5	81·9	83·0	75·6	79·8
12	75·7	78·5	74·9	77·5	74·2	76·9	78·5	77·2	83·0	79·7	85·7	82·6	86·4	84·1	89·5	85·7	86·9	86·1	84·8	84·5	81·5	82·9	76·7	79·8
13	75·6	78·4	74·9	77·5	74·1	76·9	79·0	77·4	83·4	79·4	85·9	82·8	86·6	84·1	89·8	85·8	86·7	86·1	84·8	84·5	81·2	82·9	77·0	79·5
14	75·6	78·3	74·9	77·5	74·1	76·9	79·2	77·5	82·9	79·4	85·1	82·8	87·0	84·3	89·9	85·9	86·4	86·1	84·0	84·5	80·2	82·9	77·4	79·5
15	75·7	78·3	74·8	77·4	74·1	76·9	79·5	77·8	83·0	79·7	84·5	83·1	87·0	84·1	90·0	86·0	86·6	86·0	83·9	84·5	79·2	82·7	77·6	79·5
16	77·0	78·2	75·1	77·5	74·1	77·0	79·6	77·8	83·2	79·9	84·8	83·1	87·7	84·2	90·5	86·2	86·8	85·9	83·8	84·5	78·5	82·6	77·6	79·5
17	77·2	78·1	74·9	77·5	74·1	76·9	79·4	78·0	83·2	79·9	85·0	83·1	87·9	84·2	90·7	85·9	86·0	85·8	83·3	84·4	78·0	82·5	77·8	79·5
18	77·1	78·1	74·8	77·5	74·0	76·9	79·6	78·1	84·0	80·1	85·2	83·1	88·1	84·3	90·5	86·1	85·6	85·8	83·0	84·3	77·5	82·0	77·8	79·4
19	77·1	78·2	74·8	77·5	74·2	76·9	79·3	78·1	83·8	80·1	85·6	83·1	88·3	84·6	90·7	86·1	85·7	85·7	83·2	84·2	76·9	82·1	78·0	79·4
20	77·0	78·2	74·8	77·5	74·2	76·9	79·3	78·1	83·5	80·4	86·0	83·1	88·5	84·4	90·8	86·1	86·0	85·6	83·0	84·2	77·0	82·1	78·0	79·5
21	76·2	78·2	75·1	77·4	74·1	76·9	79·4	78·3	83·9	80·6	86·0	82·9	88·5	84·4	90·6	86·2	86·4	85·7	82·2	84·1	78·0	81·9	78·2	79·6
22	75·9	78·2	75·1	77·4	74·1	76·6	79·4	78·2	84·0	80·7	86·5	83·0	88·1	84·7	90·3	86·3	86·0	85·6	82·0	84·1	80·2	81·7	78·3	79·6
23	75·8	78·2	74·9	77·4	74·2	76·6	79·0	78·3	84·0	80·9	86·6	83·1	88·0	84·9	90·0	86·4	85·5	85·6	82·1	84·1	81·0	81·6	78·7	79·6
24	75·6	78·2	74·6	77·3	74·9	76·6	79·0	78·3	84·2	81·0	86·0	82·1	88·0	85·0	90·0	86·4	84·8	85·2	82·6	83·9	80·3	81·7	79·0	79·7
25	75·5	78·2	74·5	77·3	75·4	76·6	79·0	78·3	83·9	81·0	86·0	83·0	88·3	84·9	90·0	86·7	84·9	85·5	82·5	83·8	79·3	81·7	79·1	79·7
26	75·5	78·2	74·4	77·9	75·8	76·6	78·8	78·4	84·1	81·1	86·6	83·0	88·8	84·9	89·6	86·7	85·0	85·3	82·1	83·8	78·2	81·7	78·3	79·7
27	75·5	78·2	74·6	77·2	76·2	76·5	79·0	78·7	84·7	81·1	87·2	83·2	88·3	85·0	89·7	86·6	85·0	85·2	81·8	83·7	77·5	81·6	77·8	79·7
28	75·5	78·2	74·6	77·1	77·0	76·5	79·0	78·6	84·5	81·1	88·0	83·4	88·3	85·1	89·8	86·5	85·0	85·2	81·8	83·6	76·6	81·4	77·8	80·0
29	75·3	78·1			77·5	76·7	79·2	78·6	85·4	81·3	88·5	83·6	88·6	85·1	89·8	86·6	84·5	85·2	81·7	83·5	76·6	81·2	77·3	79·9
30	75·1	78·1			77·0	76·7	79·2	78·7	86·1	81·1	88·0	83·9	88·7	85·1	89·5	86·5	83·6	85·1	81·6	83·5	76·3	81·2	76·7	80·0
31	75·2	78·1			77·4	76·9			86·1	81·3			87·9	85·1	89·4	86·7			81·6	83·4			76·4	80·1
Mean	76·0	78·4	74·9	77·6	74·8	76·9	78·4	77·4	82·7	79·9	86·3	82·8	87·7	84·4	89·7	85·9	86·5	85·9	83·3	84·3	79·7	82·4	76·9	79·9
											Year		81·4	81·3										

MINIMUM TEMPERATURE "ON THE GRASS" DURING THE INTERVAL 18h. TO 7h., G.M.T.

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	JANUARY	FEBRUARY	MARCH	APRIL	MAY	JUNE	JULY	AUGUST	SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER
	degrees Absolute											
1	69·5	69·9	64·5	72·8	74·8	85·1	80·5	79·2	75·0	79·3	70·8	*60·9*
2	72·3	71·0	58·7	66·9	74·6	81·6	84·5	86·0	78·7	77·5	83·4	62·1
3	70·4	71·8	56·7	*65·1*	72·8	85·5	84·5	84·9	80·8	76·9	78·0	63·8
4	76·5	70·9	56·9	*65·1*	77·0	83·2	84·9	78·3	80·2	72·0	76·7	72·5
5	69·5	70·6	65·1	67·0	75·9	83·6	80·4	85·3	83·1	73·0	73·2	72·9
6	71·7	67·8	57·9	75·4	75·4	78·8	79·8	78·0	74·7	78·1	69·3	75·0
7	70·6	66·2	64·9	76·5	76·0	79·2	77·8	*73·0*	72·0	76·0	76·4	72·4
8	71·0	68·7	69·8	71·8	77·0	77·3	78·8	79·4	80·8	82·1	79·2	73·4
9	72·5	69·6	59·6	70·8	71·6	78·4	73·8	84·1	79·1	82·0	79·2	72·9
10	72·3	71·0	63·1	71·6	79·7	77·5	*73·0*	79·5	79·5	82·8	76·0	65·0
11	74·6	70·8	70·4	77·4	75·4	79·5	80·1	77·8	86·7	82·1	77·2	77·0
12	69·8	68·8	67·6	72·6	80·9	81·6	*73·0*	77·0	77·0	85·5	78·0	79·9
13	71·6	68·1	69·7	72·1	78·6	78·8	82·5	77·8	82·4	79·7	73·1	70·9
14	71·9	70·2	69·7	72·0	80·0	78·0	82·5	74·1	75·7	70·6	68·1	73·7
15	80·0	70·1	*55·5*	77·7	79·5	78·2	75·1	78·4	87·2	78·9	68·0	75·8
16	77·7	63·8	70·4	78·0	74·6	*72·0*	83·7	81·6	86·7	79·7	66·1	76·4
17	73·9	61·7	71·7	70·8	*69·9*	83·7	83·9	83·6	74·8	73·7	64·0	76·6
18	74·9	66·9	72·9	69·2	82·0	84·1	83·3	84·3	74·1	77·8	*60·9*	71·1
19	74·8	66·6	73·2	73·3	79·8	76·4	79·7	81·6	75·3	81·6	61·1	76·0
20	66·6	66·7	73·3	79·0	71·7	81·9	82·2	81·6	86·9	72·5	73·3	75·8
21	65·4	68·2	73·3	76·6	72·4	78·8	85·4	83·4	80·9	*68·2*	83·6	75·6
22	65·9	63·9	75·6	76·8	74·8	83·0	81·1	84·7	73·8	72·9	83·9	76·9
23	71·3	53·7	74·7	74·9	80·5	78·6	76·8	80·5	76·2	79·0	79·3	79·4
24	68·9	*53·6*	72·9	76·0	77·2	84·1	81·8	74·8	68·4	73·0	72·5	78·5
25	(73·0)*	56·7	71·6	68·6	80·5	83·1	84·5	87·2	82·2	76·6	72·6	74·2
26	71·0	63·6	75·8	74·2	80·4	78·4	85·0	80·8	80·0	75·3	68·1	72·6
27	71·1	69·2	77·1	76·4	80·0	86·0	84·9	79·4	72·8	75·6	68·5	72·9
28	70·9	68·9	77·2	74·4	73·3	88·0	85·9	78·5	77·5	78·5	61·5	72·9
29	69·0		77·0	76·8	78·7	83·2	85·2	77·8	75·5	74·7	72·4	67·0
30	*55·9*		75·1	73·9	82·3	81·8	83·7	79·7	*67·9*	78·4	65·4	62·1
31	59·9		74·0		82·7		79·3	77·8		75·5		64·8
Mean	70·8	66·7	68·9	73·1	77·1	81·0	80·9	80·1	78·2	77·1	72·7	72·3
						Year	74·9					

* Value estimated - Bubbles in stem

The initial 2 or 3 of the readings is omitted, i.e. 275·0 degrees is printed 75·0

The minimum "on the grass" refers to the interval from 18h. on the previous day to 7h. on the day to which it is entered.

Add 0·16° to obtain temperature in degrees Kelvin where $T(°K.) = t(°C.) + 273·16$.

POTENTIAL GRADIENT (reduced to level surface)
Mean values for periods of sixty minutes between exact hours, G.M.T.

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	JANUARY, factor 4·64				FEBRUARY, factor 4·59				MARCH, factor 4·60			
	2-3h.	8-9h.	14-15h.	20-21h.	2-3h.	8-9h.	14-15h.	20-21h.	2-3h.	8-9h.	14-15h.	20-21h.
	volts per metre											
1	205	185	450	Z-	205	245	215	180	Z+	Z+	Z+	Z+
2	90	180	385	Z+	55	105	240	-50	270	275	250	Z+
3	260	Z-	110	-70	100	40	185	290	540	455	375	405
4	Z-	Z-	-40	280	210	130	145	410	90	Z+	Z+	Z+
5	300	340	160	245	40	105	260	160	250	Z+	330	425
6	180	185	610	-185	185	165	360	190	185	225	135	155
7	265	255	135	-10	335	320	305	375	Z-	365	335	Z+
8	95	130	525	Z-	270	Z+	235	235	210	265	205	180
9	265	185	Z-	510	60	60	165	450	190	280	540	505
10	320	450	260	Z-	290	190	230	330	Z+	385	305	260
11	Z-	210	Z±	255	100	300	170	90	510	70	190	195
12	200	225	420	Z-	70	190	145	190	130	90	245	500
13	115	200	185	265	105	125	195	195	Z+	545	Z±	Z+
14	225	-70	Z-	60	40	10	60	190	Z+	Z+	475	220
15	5	0	Z-	185	60	70	115	165	195	205	300	Z+
16	100	-95	-35	Z-	170	75	250	440	295	Z-	-	-
17	95	-10	Z-	185	145	150	260	155	-	-	305	345
18	60	Z-	225	260	Z+	170	285	330	Z±	Z+	130	Z-
19	130	165	175	410	105	230	240	410	245	(600)	100	25
20	195	450	265	325	105	155	-	-	240	170	15	80
21	110	115	260	255	130	165	220	160	200	Z-	Z-	200
22	230	180	410	395	90	150	295	180	95	-45	235	70
23	125	115	220	320	155	240	345	510	195	-125	Z-	465
24	200	80	250	220	390	Z+	440	Z+	95	170	Z+	175
25	170	-290	Z-	-110	Z+	355	Z+	235	115	105	215	115
26	Z+	65	150	45	Z±	Z+	Z-	115	Z-	-90	30	95
27	50	45	120	145	75	-155	220	425	25	165	300	190
28	40	25	185	195	385	60	Z±	Z+	Z±	130	Z+	185
29	60	260	125	230					190	275	Z-	155
30	220	220	75	505					5	60	-60	60
31	170	230	305	345					30	60	95	-135
(a)	160	195	261	268	155	159	233	267	195	245	243	227
(b)	159	191	232	244	130	139	220	259	194	192	199	180
Mean	(a) 221		(b) 207		(a) 203		(b) 187		(a) 227		(b) 191	

	APRIL, factor 4·60				MAY, factor 4·54				JUNE, factor 4·46			
	2-3h.	8-9h.	14-15h.	20-21h.	2-3h.	8-9h.	14-15h.	20-21h.	2-3h.	8-9h.	14-15h.	20-21h.
	volts per metre											
1	45	95	180	240	70	110	Z+	155	Z±	Z±	175	160
2	140	430	130	280	-30	Z-	145	145	375	100	125	225
3	150	200	195	425	105	Z±	220	95	260	500	95	Z±
4	430	140	155	125	170	70	50	105	Z±	400	65	450
5	55	Z+	Z-	160	225	220	145	Z+	280	240	0	Z-
6	65	60	290	150	115	225	155	Z+	40	Z-	85	105
7	5	45	Z-	35	190	Z-	250	135	45	110	5	Z-
8	90	135	Z-	150	415	295	55	230	Z-	125	-	-
9	290	360	165	330	135	165	85	505	-	-	120	265
10	-55	240	280	120	190	305	Z-	Z±	Z-	295	365	175
11	250	220	300	395	95	210	115	185	490	170	95	190
12	190	160	130	285	290	150	120	210	90	220	40	75
13	220	130	320	165	50	Z-	155	295	-145	-15	15	15
14	Z-	105	130	230	Z-	Z-	Z±	70	-95	Z-	125	-60
15	175	145	120	345	95	180	155	155	-170	85	-125	130
16	195	280	125	75	380	140	-	-	100	125	150	185
17	450	90	165	190	-	-	140	110	215	200	240	255
18	90	95	90	235	25	15	0	-20	40	465	200	150
19	Z-	195	165	5	30	125	40	130	320	140	120	210
20	-100	40	Z-	175	165	105	110	315	110	235	155	Z-
21	Z-	Z-	Z±	Z-	210	450	155	155	170	90	135	105
22	Z±	Z-	Z-	Z±	40	145	275	-210	-15	140	0	-
23	105	20	155	Z±	350	475	230	275	50	65	100	135
24	Z±	125	125	170	290	225	5	145	100	220	Z-	Z-
25	145	Z-	35	65	85	400	115	165	170	165	150	190
26	95	115	195	190	155	85	95	125	65	175	-	-
27	Z-	Z-	Z-	Z+	90	130	75	155	-	-	100	90
28	85	Z-	100	120	175	140	170	100	110	255	195	225
29	130	45	Z±	Z-	195	165	135	380	Z±	-	55	110
30	Z-	60	Z±	Z±	255	160	125	50	290	185	75	165
31					345	530	195	330				
(a)	162	147	169	194	176	209	130	189	175	205	124	172
(b)	182	184	189	237	181	211	115	174	150	161	108	161
Mean	(a) 168		(b) 198		(a) 176		(b) 170		(a) 169		(b) 145	

The potential gradient is reckoned as positive if the potential increases upwards. For indeterminate potential gradient the following notation is used: Z+, indeterminate, positive value; Z-, indeterminate, negative value; Z±, indeterminate, in magnetude and sign.

(a) Mean of all positive readings.

(b) Mean from all complete days using both positive and nagative readings.

POTENTIAL GRADIENT (reduced to level surface)
Mean values for periods of sixty minutes between exact hours, G.M.T.

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	JULY, factor 4·45				AUGUST, factor 4·43				SEPTEMBER, factor 4·48			
	2-3h.	8-9h.	14-15h.	20-21h.	2-3h.	8-9h.	14-15h.	20-21h.	2-3h.	8-9h.	14-15h.	20-21h.
	volts per metre											
1	85	90	165	195	305	440	175	280	125	175	95	125
2	110	125	70	145	330	320	425	55	120	150	85	250
3	225	125	75	185	240	50	110	135	120	110	200	175
4	255	200	125	Z-	140	115	85	150	25	125	100	170
5	65	110	150	150	110	165	160	260	35	145	125	255
6	40	Z±	Z-	25	195	85	40	145	365	165	130	240
7	Z-	Z±	Z±	155	90	165	150	240	70	50	40	190
8	Z-	20	Z-	115	100	175	150	220	155	145	150	300
9	270	185	Z±	175	125	180	205	220	-15	40	Z-	115
10	175	90	50	150	280	180	145	240	50	-	90	375
11	210	230	100	180	340	295	125	325	170	250	-75	205
12	200	145	120	135	160	90	120	270	555	340	230	105
13	265	400	35	445	185	300	215	340	Z±	265	135	290
14	405	380	135	230	180	110	140	610	50	165	-40	40
15	115	Z±	165	165	405	195	185	365	40	40	-	-
16	85	115	Z±	185	190	180	125	150	-	-	-30	285
17	90	40	90	105	195	315	125	180	30	165	Z+	230
18	20	245	115	85	165	255	175	125	90	160	115	190
19	210	175	115	265	365	290	150	130	-	-	125	265
20	205	160	110	165	180	180	150	270	425	345	140	275
21	125	110	170	130	235	150	140	180	Z-	160	230	255
22	195	165	65	175	85	90	75	190	120	150	Z-	Z-
23	175	225	100	170	340	455	120	115	140	150	195	610
24	150	145	120	100	55	165	125	365	335	220	-	-
25	65	90	105	145	140	135	120	225	-	-	140	240
26	70	-75	5	20	350	175	160	230	215	235	215	325
27	Z±	135	105	230	310	205	150	190	350	180	110	200
28	180	-	90	300	180	155	125	225	165	150	85	155
29	205	250	160	240	150	205	95	195	25	145	95	205
30	105	170	75	90	100	130	80	85	165	165	60	250
31	240	405	225	135	40	100	65	95				
(a)	162	174	109	166	202	195	142	220	164	169	131	234
(b)	163	173	107	165	202	195	142	220	177	176	108	224
Mean	(a) 153		(b) 152		(a) 190		(b) 190		(a) 175		(b) 171	

	OCTOBER, factor 4·51				NOVEMBER, factor 4·48				DECEMBER, factor 4·41			
	2-3h.	8-9h.	14-15h.	20-21h.	2-3h.	8-9h.	14-15h.	20-21h.	2-3h.	8-9h.	14-15h.	20-21h.
	volts per metre											
1	70	125	100	65	10	440	145	205	185	Z+	190	345
2	190	25	145	210	90	170	Z-	35	315	320	245	345
3	210	170	270	475	75	90	125	150	220	140	370	Z±
4	370	520	310	480	70	65	135	235	35	115	320	115
5	250	570	230	-	90	140	260	430	Z-	135	-50	Z-
6	-	-	200	270	150	260	410	50	Z-	40	245	390
7	35	30	65	5	110	220	410	305	335	375	195	325
8	55	305	115	260	100	110	195	Z-	Z-	Z-	500	140
9	125	105	225	240	85	-	175	110	110	315	140	305
10	305	335	185	245	30	40	165	245	270	365	250	335
11	155	170	425	25	Z-	75	115	170	130	350	555	400
12	230	100	50	125	170	145	210	225	135	145	245	210
13	Z-	145	210	90	Z±	150	200	400	250	125	580	225
14	15	25	185	255	245	125	295	Z±	130	105	155	Z-
15	-55	460	95	100	290	110	180	225	115	165	450	Z+
16	80	150	240	265	90	125	210	185	560	370	245	440
17	45	295	50	50	110	125	295	320	410	415	185	505
18	(10)	(35)	-	-	135	110	250	360	260	295	425	Z+
19	-	-	-	-	445	195	245	145	235	155	170	170
20	45	230	240	270	170	Z-	165	50	125	185	225	275
21	205	335	245	175	Z-	Z-	65	325	190	125	-	-
22	60	30	-265	250	225	110	235	Z-	-	90	165	135
23	520	450	145	350	185	280	185	460	95	130	75	105
24	190	165	110	50	Z-	125	Z-	190	10	140	115	80
25	80	160	210	220	230	230	380	685	55	Z+	Z±	Z+
26	90	105	100	160	445	205	245	630	Z±	95	Z-	100
27	45	45	85	85	295	200	220	315	Z-	35	Z-	110
28	105	125	60	225	220	245	405	10	-245	215	Z-	260
29	Z-	85	15	195	100	120	265	405	Z+	280	240	Z+
30	Z-	65	125	115	170	400	315	405	185	160	355	Z+
31	180	235	180	90					270	285	270	350
(a)	147	193	165	191	167	171	232	269	202	203	276	257
(b)	140	196	149	195	171	187	253	299	219	253	254	279
Mean	(a) 174		(b) 170		(a) 210		(b) 227		(a) 235		(b) 251	

The factor used for converting the potential at the collector to potential gradient in volts per metre in the open is given for each month.

	(a)	172	189	185	221
	(b)	172	188	173	220
Annual means		(a) 192		(b) 188	

POTENTIAL GRADIENT (reduced to level surface): DIURNAL INEQUALITIES

The departures from the mean of the day are adjusted for non-cyclic change†

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	Hour G.M.T. 0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	111 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	Non-cyclic change†	No. of days used	Mean
	volts per metre																										v./m.
	0a days only*																										
Jan.	+2	−37	−62	−58	−62	*−67*	−62	−58	−31	+10	−5	−45	−27	−27	+20	+36	+52	+50	+68	+64	*+86*	+70	+51	+32	−22	8	236
Feb.	+31	−25	−52	−58	*−82*	−67	−81	−71	−56	−30	+22	+44	+33	+40	+54	*+90*	+78	+29	+46	+29	+38	−18	+17	−13	−26	5	204
Mar.	+64	−37	−82	−72	*−95*	−90	−89	−13	−9	+105	+115	*+122*	+14	−73	−59	−35	−33	+20	+28	−21	−7	+79	+115	+63	−144	1	211
Apr.	+3	+20	+31	−32	−50	−12	+31	*+68*	+31	−1	−50	−10	−21	−10	*−36*	−53	−49	*−54*	+3	+57	+49	+58	+30	−1	+23	5	215
May	*+65*	+63	+28	+28	+19	+17	+22	+8	+37	+41	−34	−62	*−64*	−52	−34	−38	−39	−37	−12	+2	+2	−20	+25	+42	+36	5	172
June	−16	+49	+66	+102	*+108*	+92	+87	+37	−39	−51	−75	−64	*−91*	−68	−62	−58	−39	−41	−17	+41	+32	+21	+4	−24	−80	6	197
July	*+60*	+11	−9	+8	+29	+50	+39	+29	+9	−3	−34	−46	*−50*	−38	−45	−40	−28	−22	−15	−13	−3	+33	+24	+51	+17	10	165
Aug.	+9	+3	+7	+26	+28	+55	*+72*	+47	+13	−24	−41	*−54*	*−54*	−46	−49	−44	−39	−27	+4	+27	+30	+24	+18	+15	−7	27	185
Sept.	+12	+4	−34	−22	−10	−16	+13	−6	−15	−24	−24	−30	−20	−28	*−42*	−34	−23	−5	+44	*+76*	*+76*	+69	+32	+17	+7	9	177
Oct.	+14	−8	+10	−33	−32	−32	+3	+23	+21	−20	−24	*−44*	−39	−35	−28	−21	−8	+2	+41	+53	*+57*	+51	+39	+17	−26	11	206
Nov.	+3	−13	−51	−85	*−106*	−95	−101	−96	−69	−46	−32	−39	−5	+53	+43	+75	+69	+79	*+91*	+80	*+91*	+64	+45	+44	+24	8	256
Dec.	−48	*−61*	−60	−36	−42	−34	−38	−22	−30	−29	−34	+7	+14	−7	+4	+21	+24	+27	+76	*+110*	+64	+67	+26	−8	−104	10	296
Year	+17	−3	−17	−19	−25	−17	−9	−4	−11	−6	−18	−18	*−26*	−24	−19	−8	−3	+2	+30	+42	*+43*	+41	+35	+20	−	−	210
Winter	−3	−34	−56	−59	*−73*	−68	−71	−62	−47	−24	−12	−8	+4	+15	+30	+55	+56	+46	+70	*+71*	+70	+46	+35	+14	−	−	248
Equinox	+23	−5	−19	−40	*−47*	−37	−11	+18	+7	+15	+4	+9	−17	−37	−41	−36	−28	−9	+29	+41	+44	*+64*	+54	+24	−	−	202
Summer	+29	+31	+23	+41	+46	+53	*+55*	+30	+5	−9	−46	−57	*−65*	−51	−47	−45	−36	−32	−10	+14	+15	+15	+18	+21	−	−	180
	1a and 2a days only*																										
Jan.	−39	*−74*	−70	−47	−66	−69	−71	−20	−21	−22	+3	+22	+6	−4	0	+26	+89	+118	*+125*	+86	+36	+21	+16	−40	+46	3	138
Feb.	−28	−31	−42	−42	−56	−57	*−76*	−58	−23	−10	−9	−21	+28	+1	+19	+40	*+88*	+64	+52	+81	+42	+34	+6	−9	+46	10	147
Mar.	−3	+3	+13	+50	+60	+122	*+150*	+62	+91	+58	−8	+14	+22	+22	−77	−89	−90	−64	−101	−92	*−114*	−9	−11	−2	+31	5	144
Apr.	+24	+15	−11	−75	−60	*−77*	−63	−51	−35	−46	−67	−38	−31	+51	+48	+30	+15	+32	+30	*+124*	+91	+32	+31	+29	+3	3	159
May	+25	−20	−2	+16	−1	+54	+16	+1	+38	+40	+5	−23	−25	−43	*−57*	−48	−49	−31	−28	−3	+4	+33	*+82*	+14	0	8	119
June	*+75*	+16	*−57*	−29	−29	−37	−6	−18	−32	+20	+7	−38	−34	−11	+3	−6	−6	−21	+3	+14	+16	+43	+53	*+75*	−6	4	97
July	+40	+30	+29	−1	+21	+16	+32	+32	+8	+13	−1	−39	−35	−84	*−93*	−88	−59	−31	−25	−11	+23	+46	*+103*	+66	−5	7	166
Aug.	+54	*+59*	+31	+44	+25	+27	+22	−15	−32	−38	−19	−21	0	−10	−13	−32	+5	*−61*	+1	−2	*−61*	0	+26	+14	−44	3	221
Sept.	+13	−10	+16	−12	+6	+26	+37	+20	−2	−14	−11	+10	−8	−53	*−79*	−50	−69	−53	0	+21	+56	*+73*	+46	+31	−71	9	184
Oct.	−19	−39	*−52*	−31	−26	0	+37	+54	+39	*+65*	+17	+1	+8	−18	−30	+4	+21	+27	+16	0	−31	−15	−18	−18	+57	12	146
Nov.	−28	−53	−71	−88	*−98*	−87	−80	−82	−53	−76	−49	−60	−52	−10	+32	+91	+148	*+192*	+165	+142	+159	+71	−1	−13	+28	2	162
Dec.	−46	−13	*−93*	−82	−77	−43	−62	−46	−25	0	−18	+36	+26	+80	+59	*+128*	+116	+51	+55	−51	−17	−13	−2	+39	−42	2	142
Year	+6	−10	*−26*	−25	−25	−10	−5	−10	−4	−1	−13	−13	−8	−7	−16	+1	+17	+19	+24	+25	+17	+26	*+28*	+15	−	−	152
Winter	−35	−43	−69	−65	*−74*	−64	−72	−51	−31	−27	−18	−6	+2	+17	+27	+71	*+110*	+106	+99	+65	+55	+28	+5	−6	−	−	147
Equinox	+4	−8	−9	−17	−5	+18	*+40*	+21	+23	+16	−17	−3	−2	+1	−35	−26	*−41*	−15	−14	+13	+1	+20	+12	+10	−	−	158
Summer	+49	+21	0	+7	+4	+15	+16	0	−5	+9	−2	−30	−23	−37	−40	*−43*	−27	−36	−12	−1	−5	+31	*+66*	+42	−	−	151

Winter: January, February, November, December
Equinox: March, April, September, October
Summer: May to August

* For explanation of 0a, 1a, 2a days see p. 90, *Observatories' Year Book*, 1938.

† See p. 10, *Observatories' Year Book*, 1938.

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	JANUARY		FEBRUARY		MARCH		APRIL		MAY		JUNE	
	Character	Duration of negative potential gradient	Character	Duration of negative potential gradient	Character	Duration of negative potential gradient	Character	Duration of negative potential gradient	Character	Duration of negative potential gradient	Character	Duration of negative potential gradient
		hr.		hr.		hr.		hr.		hr.		hr.
1	2b	3·5	0a	···	0c	···	1a	0·2	2c	5·1	1c	1·5
2	1b	0·3	1a	1·1	0c	···	0a	···	2c	5·2	0a	···
3	2b	6·1	1a	1·8	0b	···	0a	···	2c	3·2	1b	0·9
4	2c	14·1	1a	2·0	1c	0·4	1b	0·4	1a	2·7	2c	4·7
5	0a	···	1a	0·1	0b	···	2c	9·9	2c	2·5	2b	3·8
6	2b	4·5	0a	···	0a	···	1c	2·4	2c	3·8	2c	4·7
7	2b	4·2	(1b)	0·1	2c	3·5	2c	12·7	2c	5·2	2c	3·3
8	2c	4·6	0b	···	1a	0·1	2b	4·3	1c	2·4	-	-
9	1b	2·5	1a	1·9	0b	···	0b	···	1b	1·6	-	-
10	2b	4·9	1c	0·2	1b	0·1	1b	2·4	2c	3·7	1b	3·2
11	2c	6·3	1a	0·2	0b	···	0a	···	1a	1·7	0a	···
12	2b	4·5	1a	0·2	1b	1·2	0a	···	0a	···	2a	3·9
13	1b	1·1	0a	···	1c	2·6	1a	0·1	2b	3·3	2a	9·0
14	2c	8·1	1a	1·3	0c	···	2b	4·4	2c	8·9	2b	13·8
15	2b	6·4	1a	1·9	1c	0·4	1a	0·4	0a	···	2b	6·1
16	2c	11·8	0a	···	-	-	0a	···	-	-	1a	0·1
17	1b	2·7	0a	···	-	-	0a	···	-	-	1b	0·4
18	2b	3·5	0b	···	2c	10·2	1b	1·3	1a	2·9	2b	3·5
19	0a	···	0b	···	1a	1·0	2c	7·4	1a	0·6	0a	···
20	0a	···	-	-	1a	2·3	2c	11·5	0a	···	1b	2·3
21	0a	···	1a	0·5	2c	6·9	2c	12·6	0a	···	1a	0·3
22	0a	···	1b	0·7	2c	6·7	2c	10·9	1b	4·2	1b	2·7
23	0a	···	0b	···	2c	11·0	2c	9·7	1b	1·2	1a	1·9
24	0a	···	0b	···	1b	1·6	2c	5·5	1a	0·6	2c	6·8
25	2c	9·7	1b	0·3	2b	4·2	2c	7·0	1a	0·4	0a	···
26	1b	1·0	2c	4·8	2c	11·7	1b	0·2	1a	0·1	-	-
27	1a	0·3	1b	3·5	1b	2·2	2c	12·5	1a	0·5	-	-
28	1a	0·1	1c	3·5	2c	5·3	2c	3·9	0a	···	0a	···
29	1a	0·4			2c	7·7	2c	10·2	1c	1·2	-	-
30	1b	0·4			2a	7·0	2c	10·9	2c	3·0	0a	···
31	0a	···			1a	0·9			1b	0·9		
Total	-	101·0	-	24·1	-	87·0	-	140·8	-	64·9	-	72·9
No. of days used	-	31	-	27	-	29	-	30	-	29	-	25
Mean	-	3·3	-	0·9	-	3·0	-	4·7	-	2·2	-	2·9

	JULY		AUGUST		SEPTEMBER		OCTOBER		NOVEMBER		DECEMBER	
	Character	Duration of negative potential gradient	Character	Duration of negative potential gradient	Character	Duration of negative potential gradient	Character	Duration of negative potential gradient	Character	Duration of negative potential gradient	Character	Duration of negative potential gradient
		hr.		hr.		hr.		hr.		hr.		hr.
1	0a	···	0a	···	0a	···	1a	0·2	(1a)	2·6	0b	···
2	1a	0·2	1a	0·3	1a	0·1	0a	···	2c	7·8	0a	···
3	1a	0·6	0a	···	0a	···	0a	···	1b	0·4	1b	0·7
4	2b	4·2	0a	···	0a	···	0a	···	1a	0·1	1a	1·1
5	1b	2·0	0a	···	0a	···	0a	···	1a	0·1	2c	8·9
6	2c	6·5	1a	0·5	1a	0·1	(0a)	···	0a	···	2c	4·4
7	2c	6·1	0a	···	1a	1·0	1a	2·7	0a	···	0a	···
8	2c	7·0	0a	···	1a	0·3	1a	1·4	2c	9·0	2c	9·4
9	1c	1·5	0a	···	2c	8·5	1a	0·4	2c	3·5	1b	1·2
10	1b	0·8	1a	0·1	(1a)	0·1	0a	···	(1b)	2·1	0a	···
11	1a	0·3	0a	···	1a	2·3	1a	0·9	2c	10·3	0a	···
12	0a	···	0a	···	1a	0·4	0a	···	1b	0·5	0a	···
13	1a	0·1	0a	···	1b	2·7	1b	0·9	1b	0·7	0a	···
14	1a	0·1	(0a)	···	1b	5·7	(1a)	0·4	1b	2·4	1b	1·3
15	1b	0·6	0a	···	1a	0·1	1a	2·2	1b	1·0	0b	···
16	2c	3·2	0a	···	1a	0·8	0a	···	0a	···	0a	···
17	1a	0·5	0a	···	1b	0·7	1a	1·4	0a	···	0a	···
18	1b	1·3	0a	···	0a	···	0a	···	0a	···	1b	0·3
19	0a	···	0a	···	1b	0·8	(0a)	···	1b	2·1	0a	···
20	0a	···	0a	···	1a	0·1	1a	0·1	2c	9·4	0a	···
21	1b	2·9	0a	···	1b	3·7	0a	···	2c	10·8	0a	···
22	0a	···	0a	···	2c	4·0	1a	2·0	2c	10·9	0a	···
23	0a	···	0a	···	0a	···	0a	···	2b	3·2	1a	0·3
24	0a	···	0a	···	0a	···	1a	0·3	1b	1·3	1b	2·5
25	0a	···	0a	···	0a	···	1a	0·5	0a	···	2c	4·3
26	2a	6·3	0a	···	0a	···	0a	···	0a	···	2c	6·7
27	2b	3·2	0a	···	0a	···	1a	0·1	0a	···	2c	9·2
28	(0a)	···	0a	···	1a	0·2	0a	···	1b	2·9	2c	5·8
29	1b	0·1	0a	···	1a	1·6	2b	4·9	1b	2·6	1c	0·3
30	0a	···	0a	···	0a	···	1b	2·9	0b	···	1c	1·5
31	0a	···	0a	···			0a	···			1b	2·6
Total	-	47·5	-	0·9	-	33·2	-	21·3	-	83·7	-	60·5
No. of days used	-	31	-	31	-	30	-	31	-	30	-	31
Mean	-	1·5	-	0·0	-	1·1	-	0·7	-	2·8	-	2·0

Annual values: Character frequency 0 1 2 — Duration: Total 737·8
No. of days used 132 138 85 — No. of days 355
Mean 2·08

TERRESTRIAL MAGNETIC FORCE: HORIZONTAL COMPONENT

Mean values for periods of sixty minutes ending at exact hours, G.M.T.

113 ESKDALEMUIR (H) — 16,000γ (0·16 C.G.S. unit) + — JANUARY

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1	536	536	541	545	546	545	543	542	539	534	522	517	523	524	518	517	525	532	533	536	534	531	529	532	533
2	533	533	532	533	536	540	541	540	531	523	518	516	517	526	525	517	494	506	525	532	530	533	534	534	527
3	534	533	533	534	536	532	529	539	531	521	511	514	514	512	513	515	517	517	493	495	508	522	529	516	521
4 d	517	515	521	521	517	521	521	518	512	502	501	509	498	517	529	505	505	512	506	505	517	521	513	512	513
5 d	521	517	511	520	524	522	540	533	529	506	505	508	504	516	517	525	520	509	513	494	514	495	504	509	515
6	502	510	517	513	513	520	521	505	501	497	491	486	496	504	493	517	508	506	506	513	510	510	514	516	507
7	520	521	526	529	524	525	523	533	519	503	496	491	502	512	517	520	517	525	526	529	529	521	524	526	519
8	523	525	528	526	531	530	529	534	523	521	521	519	522	524	521	524	529	529	529	530	530	529	529	529	526
9 q	529	529	532	533	536	537	538	538	536	527	516	516	516	518	519	521	525	529	531	532	531	532	532	532	529
10 q	537	536	533	534	536	538	540	539	533	525	520	521	521	527	529	534	538	541	541	540	541	539	535	535	534
11 q	533	535	537	539	541	542	545	545	542	537	529	525	525	529	533	538	540	542	543	543	542	540	539	538	538
12 q	537	539	539	539	540	541	541	541	536	530	529	530	531	533	537	539	541	544	546	545	545	543	541	540	*539*
13 q	539	538	538	538	540	542	543	541	537	529	517	516	521	530	537	541	541	543	543	543	544	538	530	531	536
14	532	537	533	533	536	540	541	541	534	524	513	517	527	534	532	530	528	530	536	537	541	541	540	537	533
15	536	533	536	533	537	544	541	541	532	515	509	513	517	524	525	529	536	540	544	544	530	524	510	513	529
16 d	512	515	513	532	454	517	537	544	545	526	509	511	515	513	524	516	563	521	526	488	471	489	502	496	514
17	485	517	493	500	502	504	502	505	509	494	477	489	496	500	501	506	510	517	517	517	518	529	511	507	504
18	510	514	514	513	514	517	520	518	513	500	498	496	496	505	506	517	519	510	518	516	513	517	521	518	512
19	527	513	509	517	522	530	531	524	521	506	490	485	492	495	498	504	517	525	529	529	529	521	522	528	515
20	515	520	521	521	525	532	540	537	531	520	510	509	512	518	521	520	525	534	518	513	517	528	529	531	523
21	522	537	525	523	521	536	533	529	529	522	517	510	513	519	517	516	521	528	536	537	536	536	533	529	526
22	529	529	536	537	536	536	541	539	529	525	521	514	516	520	528	531	531	521	519	521	526	522	533	526	528
23	525	523	521	524	527	532	535	534	530	526	517	515	521	529	529	531	529	529	532	532	524	527	531	536	527
24	536	537	537	537	539	541	542	492	505	509	501	489	490	498	504	521	523	521	520	509	511	521	521	529	518
25 d	527	530	533	561	541	508	487	457	447	453	426	426	477	518	516	565	508	502	486	474	454	462	466	477	490
26 d	465	464	472	482	525	470	496	482	474	450	446	450	453	466	481	494	502	505	502	493	504	502	506	513	*483*
27	506	508	501	505	504	509	510	506	500	485	481	477	492	507	496	515	519	534	517	513	545	517	513	510	507
28	529	509	503	517	523	521	521	511	508	506	496	488	489	504	505	513	516	521	521	526	529	517	513	514	513
29	518	519	517	521	529	525	533	529	521	513	495	484	487	498	502	498	513	517	522	530	532	529	531	529	516
30	530	529	521	521	522	525	525	525	523	525	523	510	502	514	520	517	517	522	527	529	530	533	521	510	522
31	510	514	519	521	532	529	528	528	522	509	501	500	500	510	517	517	519	522	528	532	535	530	525	532	520
Mean	522	523	522	526	526	527	*530*	525	521	512	503	*502*	506	514	517	521	523	524	524	522	523	523	522	521	520

MAGNETIC DECLINATION (WEST)

Mean values for periods of sixty minutes ending at exact hours, G.M.T.

114 ESKDALEMUIR (D) — 11° + — JANUARY

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′
1	1·1	1·4	2·2	0·8	0·0	0·2	0·9	0·5	0·3	0·1	2·5	3·8	5·1	6·9	7·3	6·1	5·3	2·9	2·0	1·8	1·1	0·5	0·5	0·5	*2·2*
2	0·6	1·0	1·0	1·0	1·1	0·7	0·2	0·1	-0·7	0·0	0·8	2·1	3·0	6·2	4·7	5·7	4·7	-3·6	2·3	1·5	0·6	0·2	0·3	0·9	1·4
3	1·4	1·1	1·1	1·1	1·0	1·0	2·8	2·3	0·2	-0·4	0·2	2·9	4·2	5·8	7·3	7·4	0·4	6·6	6·6	2·8	2·8	-1·6	-10·1	-0·3	1·9
4 d	-0·1	-1·6	0·9	0·1	1·3	1·0	0·2	0·1	-0·8	0·0	1·2	5·0	6·5	5·6	10·8	10·2	9·9	3·4	2·8	-3·5	-6·0	-3·8	-1·7	-2·0	1·6
5 d	1·0	-2·8	-1·7	-1·2	-1·3	2·8	-1·6	-3·1	-1·6	0·9	2·2	2·6	3·7	5·2	5·8	7·3	-5·2	-2·4	2·6	1·0	-1·0	-2·6	-3·3	-3·5	0·2
6	-3·5	1·9	-1·6	-2·4	1·0	2·8	3·1	1·6	2·6	2·9	3·0	2·0	3·9	4·6	2·5	0·8	0·9	1·6	1·9	-3·4	1·0	-1·8	-3·7	-0·7	0·9
7	-0·1	-0·6	1·9	1·7	1·5	-0·3	0·1	-0·1	-0·1	0·8	1·5	3·8	4·3	5·3	4·8	3·3	2·0	3·1	1·9	1·0	1·1	0·2	-2·8	-1·3	1·4
8	-0·5	-1·8	-3·3	-1·8	-1·4	0·7	0·2	-0·8	-0·9	1·9	1·7	2·3	3·9	3·7	2·9	3·2	2·1	2·5	1·2	0·9	0·3	0·3	0·2	0·1	0·7
9 q	0·0	0·1	0·8	1·0	1·3	1·0	1·0	0·3	-0·6	-0·9	-0·8	0·6	2·8	3·7	2·9	2·1	2·0	2·2	1·5	1·0	0·1	0·3	0·1	0·1	0·9
10 q	0·4	0·1	0·5	0·9	1·0	0·8	0·1	-0·6	-1·3	-1·0	0·0	1·1	2·1	2·8	2·0	2·0	1·9	1·8	1·7	1·1	0·5	0·3	0·1	0·1	0·8
11 q	0·3	0·5	1·0	1·0	0·8	0·3	-0·3	-0·7	-1·3	-0·7	-0·3	0·9	2·1	2·7	2·1	2·0	1·9	1·9	1·3	0·9	0·3	0·0	0·1	0·1	0·7
12 q	0·1	0·2	0·8	0·9	1·0	0·6	0·2	-0·1	-0·2	-0·2	0·2	1·5	2·7	2·8	2·0	1·8	2·0	1·9	1·7	1·0	0·5	0·2	0·1	0·2	0·9
13 q	0·4	0·5	0·5	0·2	0·1	-0·2	-0·6	-0·7	-0·7	-0·2	0·6	2·0	3·7	4·1	3·8	2·7	2·2	2·0	1·9	1·1	1·0	0·6	-0·7	-0·5	1·0
14	-0·3	-1·0	-1·6	-1·2	-0·6	0·0	-0·3	-0·7	-1·0	-0·8	0·1	2·7	4·7	4·7	3·6	4·6	5·2	4·1	3·4	1·9	0·7	0·4	0·2	-0·2	1·2
15	-0·6	0·0	0·6	0·0	0·2	0·9	0·3	-0·9	-1·6	-1·6	0·1	2·3	4·1	3·7	2·3	1·5	2·0	2·4	2·1	1·8	0·6	-2·2	-3·3	-3·6	0·5
16 d	-4·3	-2·7	-1·6	6·5	-6·5	-8·0	-4·6	-2·7	-2·8	-1·9	-0·7	1·5	3·8	3·6	3·8	3·3	9·3	6·3	-0·3	-6·7	-6·4	-5·1	-0·6	-1·9	-0·8
17	-2·8	-6·5	-2·1	-1·3	-0·3	-1·6	-0·8	-0·5	-0·3	-0·3	-0·3	1·8	3·4	2·8	2·3	1·6	1·6	1·6	2·5	1·7	1·5	1·8	-1·0	-2·7	0·1
18	-1·7	-1·8	-2·0	-0·4	-0·3	-0·5	-0·8	-1·3	-1·5	-0·6	0·1	1·2	3·2	4·7	4·6	1·5	3·8	3·0	-1·2	1·9	-0·5	-0·3	-0·6	-0·9	0·4
19	-4·9	-3·3	-1·9	1·0	0·7	0·5	0·1	-0·7	-1·7	-2·0	-0·6	1·5	3·1	4·7	4·4	3·8	3·7	2·6	2·3	1·5	1·2	0·3	0·1	-3·8	0·5
20	-2·9	-1·5	-0·5	-0·6	-0·3	-0·5	-0·3	-0·5	-1·0	-0·8	0·2	1·2	2·0	2·9	2·0	2·6	2·9	4·1	3·7	2·9	0·7	0·5	0·5	0·1	0·7
21	-0·6	-2·6	-3·5	-2·1	-1·2	0·1	-0·5	-0·8	-1·1	-0·5	0·3	0·7	1·6	2·6	1·7	1·8	2·3	2·7	2·3	1·6	-0·1	0·5	0·5	0·2	0·2
22	0·8	0·5	0·9	0·8	0·5	0·0	-0·7	-1·3	-1·6	-0·7	-0·2	0·9	2·5	3·8	3·0	3·7	4·1	5·2	4·1	3·3	0·4	-1·2	0·5	-0·9	1·2
23	-1·7	-2·6	-2·5	-0·2	-0·9	-0·7	-0·8	-0·9	-1·8	-2·1	-1·7	0·1	1·5	2·7	2·2	2·8	2·5	2·8	0·7	1·2	1·2	-0·8	0·0	0·5	0·1
24	0·7	0·6	0·8	0·5	0·5	0·3	-0·3	0·3	1·3	-0·4	-0·2	-0·2	1·3	1·5	-1·9	-1·7	-0·5	0·1	1·0	-3·7	-0·7	-2·9	-2·5	-0·2	-0·3
25 d	0·1	-0·6	-0·9	3·7	3·6	8·9	4·6	7·9	6·7	0·2	1·1	2·8	7·0	4·8	6·3	5·8	4·4	2·3	-4·4	3·6	0·3	-1·6	-6·2	-9·0	2·1
26 d	-7·0	-6·4	-6·4	-12·8	-9·6	-6·5	0·1	1·0	-2·4	-2·5	1·8	3·8	5·3	7·7	5·9	6·9	-0·8	5·8	1·9	-5·2	-3·4	-0·4	-2·3	-1·3	*-1·1*
27	-2·8	-1·0	1·9	1·9	3·7	0·9	-0·3	-1·3	-2·1	-1·8	0·1	1·9	5·0	5·2	2·5	4·5	5·3	5·5	4·0	-0·6	-8·9	-2·8	-3·4	-3·6	0·6
28	1·2	-3·5	1·0	-2·1	-2·6	-0·8	-0·9	-0·8	-1·6	-1·5	-1·1	0·1	1·8	5·5	3·7	2·8	2·1	2·0	1·6	1·0	-1·6	-4·3	-5·0	-2·9	-0·2
29	-1·6	-1·5	-1·9	-1·0	-6·0	-3·5	-2·6	-1·4	-2·4	-0·4	0·1	2·7	4·2	5·5	7·2	5·6	4·1	2·7	1·2	0·9	0·6	0·1	-0·6	-0·9	0·5
30	-2·4	-3·1	-3·6	-2·7	-2·0	-1·7	-2·1	-1·8	-2·2	-0·3	1·5	3·1	4·4	5·4	4·7	3·0	1·8	1·6	1·4	0·8	0·5	0·2	-5·4	-8·7	-0·3
31	-4·5	-3·4	-2·0	-0·9	-0·7	-0·8	-0·7	-0·9	-1·4	-1·2	-0·3	0·3	1·4	2·7	3·5	2·9	2·6	2·1	1·8	0·8	0·9	0·2	-1·6	-4·5	-0·2
Mean	-1·1	-1·3	-0·7	-0·3	-0·5	-0·1	-0·1	-0·3	-0·8	-0·5	0·4	1·9	3·5	*4·3*	3·9	3·6	2·8	2·6	1·9	0·5	-0·3	-0·8	*-1·7*	-1·6	0·6

TERRESTRIAL MAGNETIC FORCE: VERTICAL COMPONENT

Mean values for periods of sixty minutes ending at exact hours, G.M.T.

115 ESKDALEMUIR (V) — 44,000γ (0·44 C.G.S. unit) + — JANUARY

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1	1134	1132	1130	1129	1130	1130	1131	1131	1132	1130	1128	1128	1126	1129	1135	1141	1142	1142	1142	1141	1140	1139	1141	1138	1134
2	1136	1136	1136	1136	1136	1135	1134	1134	1136	1135	1135	1131	1129	1128	1134	1146	1161	1174	1154	1147	1143	1138	1136	1135	1139
3	1135	1134	1133	1134	1133	1133	1134	1130	1134	1135	1135	1131	1130	1131	1139	1144	1154	1155	1173	1184	1182	1168	1156	1143	1144
4 d	1142	1141	1136	1135	1137	1141	1142	1142	1143	1142	1138	1136	1136	1137	1146	1170	1167	1166	1172	1177	1160	1140	1135	1143	1147
5 d	1140	1138	1142	1142	1138	1133	1126	1131	1135	1136	1138	1137	1134	1140	1149	1151	1163	1157	1171	1179	1155	1161	1162	1156	1146
6	1137	1109	1117	1129	1125	1124	1128	1136	1140	1142	1145	1149	1159	1167	1168	1172	1164	1161	1161	1160	1153	1139	1139	1143	1144
7	1144	1145	1141	1128	1130	1136	1141	1137	1140	1143	1143	1144	1147	1149	1149	1153	1154	1149	1148	1147	1146	1147	1148	1146	1144
8	1144	1143	1143	1141	1139	1137	1138	1137	1139	1135	1134	1134	1135	1140	1143	1147	1146	1143	1143	1142	1142	1141	1141	1141	1140
9 q	1142	1142	1140	1140	1138	1137	1136	1136	1137	1138	1138	1138	1137	1142	1145	1146	1143	1142	1142	1142	1142	1138	1137	1138	1140
10 q	1137	1137	1137	1137	1137	1136	1136	1135	1136	1132	1130	1130	1131	1135	1138	1137	1137	1137	1136	1136	1136	1135	1135	1135	1135
11 q	1136	1136	1136	1136	1136	1135	1134	1132	1131	1129	1130	1130	1129	1132	1135	1135	1136	1136	1135	1136	1135	1135	1135	1134	1134
12 q	1135	1134	1135	1135	1134	1135	1134	1132	1132	1131	1130	1129	1130	1134	1136	1135	1136	1136	1136	1136	1135	1135	1135	1134	1134
13 q	1132	1132	1132	1132	1131	1131	1131	1131	1131	1131	1134	1132	1129	1132	1136	1135	1135	1135	1136	1136	1136	1136	1138	1138	*1133*
14	1136	1133	1134	1135	1134	1133	1132	1132	1135	1137	1137	1136	1132	1134	1136	1135	1136	1138	1140	1140	1138	1136	1135	1135	1135
15	1135	1135	1133	1134	1134	1132	1134	1135	1137	1138	1137	1135	1134	1136	1136	1136	1135	1135	1136	1137	1143	1149	1149	1144	1137
16 d	1136	1131	1129	1113	1066	1154	1112	1121	1129	1134	1136	1134	1133	1136	1138	1147	1150	1198	1218	1194	1191	1191	1182	1177	1148
17	1171	1150	1145	1150	1153	1150	1149	1149	1149	1152	1155	1153	1149	1151	1153	1153	1152	1150	1151	1154	1155	1147	1152	1154	1152
18	1153	1149	1147	1145	1145	1144	1144	1145	1146	1148	1149	1152	1148	1149	1155	1160	1154	1158	1163	1159	1160	1155	1149	1147	1151
19	1137	1136	1140	1141	1143	1143	1143	1145	1147	1147	1147	1147	1144	1141	1143	1146	1145	1143	1142	1143	1144	1149	1149	1140	1144
20	1144	1144	1144	1145	1143	1142	1141	1141	1142	1145	1145	1145	1149	1147	1146	1142	1141	1140	1147	1155	1155	1151	1148	1147	1145
21	1148	1144	1141	1138	1138	1136	1136	1136	1137	1137	1137	1139	1138	1136	1141	1141	1140	1137	1138	1140	1141	1138	1138	1141	1139
22	1139	1140	1138	1137	1136	1136	1136	1136	1137	1141	1141	1146	1144	1141	1137	1137	1141	1148	1154	1154	1153	1152	1144	1144	1142
23	1147	1147	1147	1144	1142	1142	1141	1138	1138	1136	1136	1135	1135	1136	1136	1137	1138	1141	1142	1142	1142	1142	1141	1137	1140
24	1136	1136	1136	1136	1136	1136	1134	1140	1148	1147	1147	1146	1146	1148	1156	1154	1150	1149	1153	1161	1159	1153	1144	1138	1145
25 d	1128	1133	1135	1118	1084	1088	1086	1087	1092	1112	1130	1160	1191	1225	1221	1250	1231	1216	1224	1195	1201	1197	1189	1173	*1161*
26 d	1171	1174	1172	1153	1114	1111	1108	1129	1148	1155	1150	1153	1160	1167	1168	1177	1193	1180	1185	1190	1176	1162	1159	1155	1159
27	1155	1151	1148	1145	1136	1141	1148	1153	1154	1155	1152	1150	1148	1152	1159	1160	1154	1150	1158	1167	1161	1155	1155	1156	1153
28	1134	1139	1135	1137	1142	1144	1144	1146	1147	1148	1148	1149	1148	1147	1153	1152	1152	1150	1152	1151	1152	1150	1148	1148	1147
29	1148	1148	1149	1146	1134	1136	1136	1137	1141	1143	1147	1148	1147	1147	1155	1159	1160	1158	1154	1151	1149	1148	1148	1148	1147
30	1147	1145	1144	1145	1146	1144	1143	1144	1143	1138	1136	1136	1136	1135	1137	1139	1142	1144	1146	1147	1147	1144	1153	1148	1143
31	1145	1143	1142	1135	1131	1135	1140	1143	1146	1145	1143	1141	1136	1131	1135	1141	1142	1143	1144	1144	1143	1145	1146	1137	1141
Mean	1142	1140	1139	1137	*1132*	1135	1134	1135	1138	1139	1140	1141	1141	1144	1147	1151	1151	1152	*1155*	1154	1152	1149	1147	1145	1143

DAILY EXTREMES OF TERRESTRIAL MAGNETIC ELEMENTS, MAGNETIC CHARACTER FIGURES AND TEMPERATURE IN MAGNET HOUSE

116 ESKDALEMUIR — JANUARY

	TERRESTRIAL MAGNETIC ELEMENTS												3-hr. range indices K	Sum of K indices	Magnetic character of day (0-2)	Temperature in magnet house 200 +
	Horizontal force					Declination			Vertical force							
	Maximum 16,000γ +		Minimum 16,000γ +		Range	Maximum 11° +		Minimum 11° +		Range	Maximum 44,000γ +		Minimum 44,000γ +		Range				
	h. m.	γ	γ	h. m.	γ	h. m.	′	′	h. m.	′	h. m.	γ	γ	h. m.	γ				°A.
1	3 12	549	489	15 25	60	13 1	68·0	59·5	9 45	8·5	15 33	1144	1124	12 22	20	1,1,1,2,2,2,0,1	10	0	82·2
2	6 37	544	474	17 13	70	15 50	67·8	48·0	17 20	19·8	17 13	1185	1126	13 9	59	0,1,2,1,2,4,3,1	14	1	82·2
3	22 23	557	472	18 31	85	18 15	71·1	42·6	22 16	28·5	19 8	1188	1129	13 0	59	0,1,2,2,2,3,3,4	17	1	82·1
4 d	11 24	553	479	19 39	74	15 2	74·5	48·3	19 43	26·2	19 41	1183	1131	11 20	52	2,2,0,4,3,3,4,3	21	1	82·1
5 d	18 31	577	451	18 53	126	18 49	71·8	49·7	16 30	22·1	19 55	1190	1124	6 32	66	3,3,2,3,4,4,5,3	27	1	82·0
6	21 51	540	462	12 9	78	12 0	66·4	51·1	0 12	15·3	14 52	1179	1105	1 37	74	4,3,2,2,3,3,3,3	23	1	82·0
7	7 20	540	485	11 36	55	12 1	66·1	54·0	22 25	12·1	16 9	1155	1124	3 40	31	2,2,2,1,2,2,1,2	14	1	82·0
8	7 15	539	510	9 4	29	12 56	64·6	56·3	2 48	8·3	16 6	1148	1132	11 55	16	2,2,2,2,1,0,0,0	9	0	82·0
9 q	7 15	540	513	12 3	27	13 36	63·8	58·4	9 48	5·4	15 40	1147	1135	7 20	12	0,0,0,1,0,0,0,0	1	0	82·0
10 q	20 53	542	517	10 46	25	13 33	62·9	58·2	8 27	4·7	0 10	1138	1129	10 52	9	1,0,0,0,0,0,0,0	1	0	81·9
11 q	7 11	546	522	12 4	24	13 30	63·3	58·6	8 37	4·7	17 0	1137	1129	12 30	*8*	0,0,0,1,0,0,0,0	1	0	82·0
12 q	18 8	548	529	10 30	*19*	12 57	63·0	59·3	9 40	*3·7*	14 30	1137	1129	11 50	*8*	0,0,0,0,0,1,0,0	1	0	81·7
13 q	19 58	545	513	10 56	32	13 28	64·6	58·7	22 40	5·9	22 50	1140	1128	12 12	12	0,0,0,0,1,0,0,1	2	0	81·8
14	6 50	542	513	10 54	29	13 1	65·6	58·3	2 21	7·3	19 10	1141	1130	12 53	11	1,0,0,1,1,1,1,0	5	0	81·6
15	18 28	548	504	10 52	44	12 55	64·7	55·7	23 11	9·0	20 9	1152	1130	5 31	22	0,1,1,2,1,1,2,2	10	0	81·6
16 d	18 42	603	440	4 7	163	3 48	78·1	43·8	4 58	*34·3*	18 51	1259	*1059*	4 31	200	2,5,3,2,3,4,5,3	27	2	81·6
17	21 21	557	466	10 10	91	12 59	66·0	50·1	1 7	15·9	0 1	1175	1141	2 4	34	4,2,2,3,2,2,2,3	20	1	81·6
18	23 41	534	493	11 25	41	13 39	66·6	55·3	1 50	11·3	18 12	1164	1141	24 0	23	2,1,1,1,2,3,2,3	15	1	81·7
19	22 59	546	473	11 40	73	23 4	67·2	52·0	23 29	15·2	22 3	1153	1134	0 42	19	3,2,2,3,1,2,1,4	18	1	81·7
20	6 31	541	505	18 54	36	18 10) 17 48)	65·1	54·9	0 1	10·2	20 38	1157	1137	17 40	20	2,2,0,0,1,2,2,1	10	0	81·7
21	1 41	553	509	11 11	44	13 53	63·1	53·8	1 37	9·3	1 10	1149	1135	5 40	14	3,2,1,1,1,2,2,0	12	0	81·8
22	7 13	544	504	17 41	40	17 30	68·0	56·7	20 56	11·3	17 57	1155	1135	7 0	20	1,0,1,1,1,3,3,2	12	0	81·8
23	14 51	540	513	10 32	27	14 51	63·6	55·9	1 33	7·7	2 10	1148	1135	12 30	13	2,1,0,1,2,2,2,2	12	0	81·8
24	24 0	577	470	7 48	107	8 38	64·8	53·7	19 20	11·1	19 18	1164	1133	6 30	31	0,1,4,3,2,2,3,4	19	1	81·8
25 d	15 19	*659*	*407*	11 10	*252*	15 21	*78·2*	46·8	18 41	31·4	15 8	*1303*	1065	6 39	*238*	4,5,5,4,4,5,4,5	37	2	81·9
26 d	4 18	540	441	10 20	99	13 38	70·4	*38·9*	3 49	31·5	16 26	1201	1101	5 1	100	3,4,3,3,3,4,4,2	26	1	81·9
27	20 21	580	450	11 11	130	13 11	67·5	44·1	20 19	23·4	19 51	1178	1135	4 48	43	3,2,2,2,3,3,4,3	22	1	81·9
28	0 10	538	485	12 9	53	13 33	66·6	53·8	20 40	12·8	16 0	1154	1126	0 44	28	3,1,2,2,2,1,3,2	16	1	81·9
29	20 5	537	479	10 56	58	14 34	70·5	52·1	4 40	18·4	16 43	1161	1132	4 40	29	1,3,2,2,3,2,2,1	16	1	81·9
30	22 51	546	494	23 33	52	13 52	66·0	46·1	23 9	19·9	22 36	1159	1134	13 51	25	2,1,1,2,2,1,1,4	14	0	81·9
31	23 12	539	497	11 40	42	14 16	63·7	51·0	23 51	12·7	22 30	1149	1130	4 35	19	2,1,1,1,2,0,1,3	11	0	81·9
Mean	- -	553	486	- -	67	- -	67·2	52·5	- -	14·8	- -	1168	1125	- -	42	-	-	0·58	81·9

q denotes an international quiet day and d an international disturbed day.

TERRESTRIAL MAGNETIC FORCE: HORIZONTAL COMPONENT

Mean values for periods of sixty minutes ending at exact hours, G.M.T.

117 ESKDALEMUIR (H) — 16,000γ (0·16 C.G.S. unit) + — FEBRUARY

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1	528	526	523	522	532	537	533	531	512	508	504	499	495	505	517	524	524	524	528	528	526	524	535	531	521
2	532	532	532	531	534	538	537	530	524	512	504	496	496	504	516	524	528	536	534	537	537	521	528	526	525
3	528	524	525	526	528	531	534	535	534	528	505	492	494	499	504	526	531	531	533	543	539	539	541	539	525
4	544	549	536	527	528	535	548	552	538	516	505	499	484	488	501	512	519	521	525	528	531	520	524	539	524
5	528	528	527	529	531	532	532	532	528	513	503	504	509	516	524	528	524	523	530	532	534	535	530	528	525
6	529	535	534	537	538	535	556	548	524	515	505	501	495	508	512	517	527	524	524	523	529	536	536	535	526
7	533	532	533	536	539	542	543	540	540	526	512	500	503	511	503	525	532	537	512	520	523	528	530	535	526
8 d	540	545	541	532	531	533	538	528	516	512	494	469	468	491	500	491	513	507	504	485	471	484	495	488	507
9 d	500	496	496	511	510	524	513	509	512	492	484	485	501	500	503	508	517	508	526	539	521	516	517	499	508
10	510	516	512	512	514	519	529	540	531	521	484	477	477	492	501	497	509	523	521	523	521	524	528	525	513
11	522	523	523	524	528	527	528	527	519	496	481	478	483	492	508	516	523	530	532	534	541	537	532	533	518
12	536	535	535	535	539	541	541	540	532	512	497	492	497	505	512	520	517	524	528	532	535	535	535	529	525
13	531	535	536	539	541	543	544	544	532	516	497	496	500	501	508	522	528	526	533	535	540	539	539	539	528
14 q	527	539	540	540	540	544	543	542	531	520	505	496	498	510	524	528	528	532	535	541	543	540	539	538	530
15 q	542	540	541	543	543	544	545	543	533	520	505	495	496	507	516	520	524	528	536	537	537	540	540	539	530
16 d	538	539	541	567	568	560	564	564	539	499	465	440	424	464	505	497	500	489	484	468	481	466	457	415	501
17 d	331	457	434	450	452	512	496	472	452	444	446	444	453	448	472	488	509	509	509	504	508	504	507	504	*471*
18	516	493	500	505	512	512	504	500	489	481	479	481	490	496	505	516	519	521	528	528	512	518	515	504	505
19 d	512	512	509	509	512	513	510	524	515	505	497	485	490	499	524	528	501	522	503	507	516	503	505	496	508
20	531	516	516	523	528	516	513	509	504	493	491	489	489	490	500	507	512	519	523	524	528	528	526	528	513
21 q	528	528	531	532	531	532	532	531	522	501	492	485	489	507	517	520	521	524	528	532	533	533	533	533	521
22 q	532	533	534	535	536	537	537	533	530	519	504	503	511	520	527	531	532	535	536	539	540	537	539	539	530
23 q	537	535	536	539	539	540	539	535	530	514	504	500	501	509	524	529	537	539	537	536	537	537	536	535	529
24	532	538	537	543	547	552	553	552	545	528	512	506	497	511	523	527	535	547	529	524	537	524	528	526	*531*
25	541	543	541	543	544	543	545	549	539	516	499	494	492	484	499	509	522	529	532	537	541	535	528	532	527
26	544	531	512	523	523	536	542	535	516	512	504	491	486	502	510	515	519	524	529	532	532	532	532	523	521
27	516	520	523	518	524	529	534	536	530	514	508	504	501	503	512	520	523	531	536	537	541	539	536	536	524
28	533	532	530	532	532	536	539	540	538	520	515	514	519	527	527	528	524	530	536	542	540	528	533	536	530
Mean	522	526	524	527	529	534	*535*	533	523	509	497	*490*	491	500	511	517	521	525	525	527	528	525	526	523	519

MAGNETIC DECLINATION (WEST)

Mean values for periods of sixty minutes ending at exact hours, G.M.T.

118 ESKDALEMUIR (D) — 11° + — FEBRUARY

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′
1	-7·9	-4·2	-1·7	-2·5	-1·7	-0·7	-1·6	-1·3	-1·7	-2·5	-1·4	0·9	2·9	4·3	3·7	2·7	2·0	1·7	1·3	1·1	0·5	-0·1	-1·1	-0·8	-0·3
2	0·5	0·7	0·5	0·1	0·1	0·1	-0·6	-1·3	-1·8	-2·6	-0·8	1·1	3·0	4·9	5·0	4·1	2·6	2·1	2·1	2·0	2·6	2·0	1·1	0·1	1·1
3	0·0	-0·8	-0·8	-0·9	-1·1	-0·9	-1·8	-1·6	0·0	-0·8	0·3	1·8	2·8	4·4	4·5	5·5	4·9	5·0	4·8	2·8	1·4	0·5	0·2	0·1	1·3
4	-0·2	-5·0	-5·7	-3·8	-3·6	-0·8	-0·1	-0·6	-1·9	-0·6	0·5	2·3	4·8	4·1	5·2	3·3	2·1	1·4	1·3	0·7	0·5	-0·8	-0·8	-0·2	0·1
5	-1·7	-0·1	-0·4	-0·2	-0·6	-0·6	-0·9	-1·5	-2·6	-2·8	-0·6	2·8	4·8	5·4	3·5	2·8	1·5	1·1	1·2	1·3	0·3	0·1	-1·3	-1·7	0·4
6	0·1	-0·2	0·2	-0·2	-0·8	0·2	1·2	1·8	-0·9	-3·1	-2·7	0·2	4·0	6·4	5·9	5·7	3·4	2·1	-1·6	-0·8	-2·4	-3·0	-0·6	0·1	0·6
7	0·1	0·2	0·2	0·1	-0·2	-0·6	-1·0	-1·6	-2·0	-1·1	1·5	4·1	8·4	9·1	7·8	4·6	3·7	3·9	4·4	2·3	0·2	-1·7	-2·0	-1·5	*1·6*
8 d	-0·9	-0·2	-1·5	-2·4	-2·1	-1·7	-1·4	-1·8	1·9	3·7	2·9	5·4	6·5	9·1	12·9	10·8	12·4	3·9	2·7	-6·2	-6·1	-6·2	-15·3	-11·2	0·6
9 d	-3·8	-5·3	1·1	-5·3	-1·5	-1·0	-2·1	-2·2	-3·3	-3·1	0·1	0·5	2·4	3·6	3·8	3·0	1·7	1·5	1·8	1·9	-10·3	-15·3	-10·6	-9·8	-2·2
10	-7·9	-6·2	-5·3	-1·8	-2·1	-1·7	-1·8	-2·0	-3·0	-3·3	-0·7	2·8	5·4	9·1	12·1	8·0	4·4	2·4	1·7	0·8	0·3	-0·4	-2·6	-1·8	0·3
11	-2·1	-0·5	-0·3	-0·1	-0·4	-1·3	-1·7	-2·1	-4·0	-4·4	-2·9	-0·3	2·0	3·8	4·8	4·4	3·5	2·9	2·4	1·9	1·8	-0·9	-2·5	-2·3	0·1
12	0·3	0·2	0·1	0·1	0·1	-0·4	-0·7	-1·5	-3·2	-5·2	-3·5	-0·4	2·7	4·4	6·1	4·9	2·8	2·7	2·0	1·5	1·0	0·5	0·0	-3·3	0·5
13	-0·7	0·0	0·2	0·3	0·5	0·3	-1·0	-1·6	-2·8	-3·6	-2·5	1·1	5·2	5·3	4·9	3·6	2·7	1·7	1·9	1·9	0·9	1·0	0·5	0·1	0·8
14 q	0·1	0·1	0·2	0·2	0·1	-0·2	-0·3	-1·3	-3·2	-4·5	-3·3	0·0	2·9	5·2	5·5	5·0	3·0	2·0	2·7	2·5	1·6	1·0	0·5	0·6	0·9
15 q	0·1	0·1	0·2	0·1	-0·1	-0·1	-1·5	-2·2	-4·2	-5·6	-3·7	-0·8	2·1	3·8	4·4	3·8	3·1	3·0	2·0	1·9	1·1	0·9	0·8	0·9	0·4
16 d	0·9	1·0	0·8	1·8	0·3	-1·3	-1·7	-2·6	-4·4	-5·3	-0·9	3·9	8·0	10·7	13·4	5·3	7·5	-4·8	2·4	0·4	-3·8	-8·8	-7·1	-7·9	0·3
17 d	-11·7	-21·3	-36·3	-8·2	-7·4	-8·1	-2·3	-6·7	-7·5	-3·2	-1·0	2·1	5·2	6·3	8·5	9·9	4·9	4·6	2·8	2·0	0·6	0·0	0·0	-0·3	*-2·8*
18	-1·2	-6·4	-6·4	-4·9	-6·1	-4·1	-3·6	-3·5	-4·7	-3·7	0·0	3·2	7·1	6·9	6·2	5·0	3·4	3·3	4·5	7·8	2·1	2·6	-3·1	-2·9	0·1
19 d	-2·1	-4·4	-3·7	-4·5	-4·3	-5·6	-6·1	-2·8	-4·9	-5·5	-2·7	1·1	5·1	9·4	9·9	9·7	6·0	5·0	0·1	0·0	-5·1	-9·8	-11·9	6·4	-0·9
20	-4·7	-3·5	0·8	0·8	-1·4	-2·7	-1·9	-2·7	-3·5	-3·8	-2·1	0·2	5·2	4·8	5·2	3·8	2·0	1·2	0·5	0·0	-0·8	-0·6	-0·8	-0·3	-0·2
21 q	0·0	0·2	0·3	0·1	-0·5	-1·0	-2·1	-3·3	-4·7	-4·9	-1·9	2·0	3·5	3·7	3·8	2·1	1·5	1·1	1·1	0·8	0·5	0·2	0·1	0·0	0·1
22 q	0·1	0·0	0·1	0·1	-0·1	-0·6	-1·3	-2·0	-3·4	-4·4	-2·6	0·2	2·8	4·3	3·7	2·8	1·9	1·0	1·0	1·0	0·9	-2·5	-1·5	0·1	0·1
23 q	0·1	0·0	0·5	0·3	0·2	-0·1	-0·8	-2·0	-3·7	-4·7	-2·7	0·1	3·2	4·4	4·0	2·7	2·0	1·7	1·2	1·0	1·0	0·5	0·2	0·6	0·4
24	-0·9	-1·0	-2·5	-1·6	-1·1	-1·1	-1·6	-2·2	-3·9	-4·6	-2·7	1·8	3·9	5·1	6·8	5·1	2·9	1·8	0·2	0·9	0·2	-0·4	-0·6	-0·6	0·2
25	-0·4	0·1	0·1	0·3	0·0	-0·2	-0·2	-1·6	-1·9	-3·2	-0·1	2·4	5·7	6·4	6·3	5·4	3·6	1·1	0·0	0·2	-0·3	-4·4	-4·3	-2·7	0·5
26	-4·6	-12·4	-16·0	-5·3	1·0	-0·8	-1·3	-1·5	-3·0	-4·0	-2·4	1·2	3·7	6·3	5·9	4·8	2·8	2·0	1·1	0·3	0·0	0·0	-0·8	-4·5	-1·1
27	-5·2	-5·1	-4·4	-3·6	-1·5	-3·5	-2·8	-2·6	-3·1	-3·5	-1·4	2·6	5·5	6·1	4·8	3·1	1·6	1·0	0·9	0·9	1·0	0·3	-1·6	-1·6	-0·5
28	-1·8	-1·6	-2·6	-2·5	-3·2	-3·3	-1·9	-1·9	-3·1	-4·5	-2·7	1·0	4·8	7·5	6·5	5·4	2·2	0·8	1·5	1·0	0·2	-1·1	-4·2	-4·7	-0·3
Mean	-2·0	-2·7	-2·9	-1·5	-1·3	-1·5	-1·5	-2·0	-3·0	*-3·4*	-1·4	1·5	4·4	5·9	*6·3*	4·9	3·4	2·0	1·7	1·1	-0·4	-1·7	-2·5	-1·8	0·1

TERRESTRIAL MAGNETIC FORCE: VERTICAL COMPONENT

Mean values for periods of sixty minutes ending at exact hours, G.M.T.

119 ESKDALEMUIR (V) — 44,000γ (0·44 C.G.S. unit) + — FEBRUARY

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1	1131	1125	1126	1127	1125	1123	1124	1127	1133	1141	1143	1145	1143	1141	1141	1142	1142	1142	1143	1144	1145	1144	1141	1141	1137
2	1139	1140	1140	1141	1140	1139	1140	1141	1142	1143	1140	1138	1140	1142	1142	1141	1141	1140	1140	1142	1143	1150	1151	1151	1142
3	1148	1148	1146	1143	1142	1140	1137	1136	1136	1135	1135	1136	1137	1138	1142	1144	1148	1149	1147	1146	1144	1143	1141	1138	1142
4	1134	1119	1112	1119	1123	1125	1129	1130	1134	1135	1135	1135	1138	1147	1146	1148	1148	1143	1142	1142	1143	1147	1146	1137	1136
5	1136	1138	1140	1141	1141	1141	1140	1138	1140	1138	1133	1132	1130	1134	1136	1138	1138	1141	1141	1140	1140	1139	1142	1143	1138
6	1142	1141	1141	1141	1138	1136	1127	1125	1132	1136	1136	1135	1132	1132	1135	1141	1146	1150	1153	1153	1148	1141	1137	1136	1139
7	1137	1140	1141	1140	1139	1137	1137	1136	1136	1131	1126	1128	1130	1135	1142	1141	1141	1144	1154	1158	1156	1149	1144	1138	1140
8 d	1135	1131	1130	1134	1135	1136	1135	1136	1136	1130	1131	1137	1141	1146	1165	1184	1186	1211	1220	1207	1177	1142	1150	1131	1153
9 d	1130	1131	1111	1106	1105	1111	1128	1140	1143	1142	1143	1144	1141	1141	1143	1147	1157	1157	1149	1148	1161	1150	1138	1124	1137
10	1128	1146	1151	1153	1153	1149	1146	1142	1143	1141	1146	1142	1138	1147	1166	1173	1164	1158	1155	1155	1154	1150	1147	1145	1150
11	1144	1143	1143	1143	1143	1143	1144	1146	1148	1143	1138	1135	1134	1134	1137	1137	1140	1142	1142	1142	1142	1145	1144	1141	1141
12	1138	1139	1141	1141	1141	1141	1141	1141	1145	1145	1139	1135	1132	1132	1135	1141	1143	1142	1142	1142	1142	1141	1141	1143	1140
13	1141	1137	1137	1137	1137	1137	1137	1137	1143	1141	1138	1136	1135	1136	1136	1139	1141	1143	1142	1142	1142	1141	1140	1138	1139
14 q	1138	1138	1137	1137	1137	1138	1138	1140	1143	1140	1133	1132	1133	1135	1135	1136	1140	1141	1140	1138	1140	1138	1137	1137	1138
15 q	1136	1136	1136	1136	1136	1136	1136	1137	1143	1144	1138	1136	1135	1134	1135	1136	1136	1137	1137	1138	1141	1140	1137	1137	1137
16 d	1136	1136	1136	1129	1125	1128	1126	1127	1132	1136	1136	1142	1164	1207	1254	1268	1286	1281	1219	1203	1209	1209	1182	1149	*1176*
17 d	1089	1117	1071	1041	1079	1077	1105	1129	1146	1136	1140	1143	1153	1159	1169	1177	1195	1201	1182	1172	1167	1166	1165	1163	1139
18	1153	1147	1135	1131	1131	1131	1135	1142	1146	1149	1149	1148	1148	1150	1159	1171	1171	1167	1165	1168	1180	1174	1168	1166	1153
19 d	1165	1159	1158	1155	1153	1147	1146	1136	1138	1145	1145	1143	1142	1153	1165	1180	1183	1180	1195	1179	1173	1143	1131	1117	1155
20	1093	1124	1123	1088	1105	1119	1133	1141	1143	1145	1140	1134	1132	1136	1141	1146	1149	1149	1148	1148	1148	1147	1147	1146	1134
21 q	1146	1145	1145	1145	1144	1145	1144	1145	1148	1145	1141	1141	1141	1137	1140	1142	1142	1142	1142	1142	1142	1142	1143	1143	1143
22 q	1142	1142	1142	1142	1142	1141	1141	1142	1145	1137	1132	1131	1130	1130	1135	1137	1140	1141	1140	1140	1141	1141	1141	1137	1139
23 q	1137	1138	1140	1140	1140	1140	1141	1141	1141	1138	1137	1135	1131	1130	1132	1136	1136	1137	1137	1137	1137	1138	1139	1138	1137
24	1138	1135	1136	1137	1137	1136	1136	1137	1140	1131	1128	1125	1129	1126	1129	1133	1136	1141	1147	1148	1143	1137	1136	1136	1136
25	1135	1134	1135	1135	1134	1134	1134	1131	1132	1136	1131	1131	1132	1136	1140	1147	1150	1150	1148	1147	1145	1147	1147	1141	1139
26	1116	1102	1104	1111	1121	1129	1131	1135	1141	1136	1129	1123	1123	1129	1136	1147	1153	1152	1147	1145	1143	1142	1142	1145	*1133*
27	1147	1143	1142	1142	1134	1134	1136	1137	1140	1141	1133	1130	1129	1130	1136	1141	1146	1147	1143	1143	1142	1142	1143	1142	1139
28	1140	1138	1138	1140	1141	1142	1140	1140	1142	1139	1132	1123	1120	1128	1138	1148	1150	1149	1146	1143	1144	1147	1144	1133	1139
Mean	1135	1136	1133	*1131*	1132	1133	1135	1137	1140	1139	1137	1135	1136	1140	1147	1152	1155	*1156*	1154	1152	1151	1148	1145	1141	1142

DAILY EXTREMES OF TERRESTRIAL MAGNETIC ELEMENTS, MAGNETIC CHARACTER FIGURES AND TEMPERATURE IN MAGNET HOUSE

120 ESKDALEMUIR — FEBRUARY

	TERRESTRIAL MAGNETIC ELEMENTS												3-hr. range indices K	Sum of K indices	Magnetic character of day (0-2)	Temperature in magnet house 200 +
	Horizontal force					Declination			Vertical force							
	Maximum 16,000γ +		Minimum 16,000γ +		Range	Maximum 11° +	Minimum 11° +	Range	Maximum 44,000γ +	Minimum 44,000γ +	Range					
	h. m.	γ	γ	h. m.	γ	h. m.	′	′	h. m.	′	′	h. m.	γ	γ	h. m.	γ				°A.
1	22 35	543	492	12 40	51	13 21	65·2	49·6	0 21	15·6	20 32	1148	1121	5 40	27	3,2,2,1,2,0,2,2	14	1	81·7
2	20 20	540	493	12 7	47	14 10	66·2	57·3	9 24	*8·9*	22 0	1153	1137	11 40	16	0,0,1,1,2,2,2,1	9	0	81·7
3	19 56	551	486	10 59	65	18 1	67·2	57·6	9 30	9·6	17 12	1153	1134	10 42	19	1,0,2,3,1,2,2,1	12	0	81·6
4	7 27	556	466	13 6	90	12 47	66·7	51·7	2 42	15·0	16 0	1149	1108	2 30	41	3,3,2,2,3,2,2,2	19	1	81·6
5	18 53	540	493	10 41	47	13 33	67·5	56·6	9 33	10·9	22 54	1144	1129	12 47	15	1,0,0,2,2,2,2,1	10	0	81·6
6	6 21	562	488	12 9	74	13 19	67·3	54·7	20 57	12·6	18 22	1155	1124	7 46	31	2,1,3,2,2,2,2,2	16	1	81·6
7	8 14	552	489	12 3	63	13 8	71·3	56·5	8 18	14·8	20 0	1159	1124	10 52	35	0,0,2,2,2,2,2,2	12	1	81·6
8 d	1 22	552	426	21 56	126	14 20	76·6	39·2	22 10	37·4	18 44	1258	1128	9 12	130	2,1,3,3,3,4,4,5	25	1	81·6
9 d	19 42	546	473	2 10	73	2 22	65·4	35·5	20 55	29·9	20 40	1177	1094	2 52	83	3,3,2,2,1,2,5,4	22	1	81·6
10	7 49	548	461	12 12	87	14 29	74·2	50·8	0 28	23·4	15 3	1178	1119	0 1	59	2,1,2,3,3,3,1,2	17	1	81·6
11	21 5	550	477	11 43	73	14 16	65·9	55·1	9 0	10·8	8 30	1149	1132	13 5	17	1,1,1,2,2,2,2,3	14	0	81·6
12	5 28	543	488	11 31	55	14 45	67·2	54·5	9 15	12·7	9 0	1149	1131	12 44	18	1,1,2,2,2,2,1,2	13	0	81·6
13	6 58	549	492	11 33	57	14 5	67·4	55·6	9 25	11·8	9 0	1146	1135	12 15	*11*	1,1,1,2,2,1,2,0	10	0	81·6
14 q	19 58	549	492	11 50	57	14 0	65·8	53·8	9 38	12·0	9 0	1145	1131	10 49	14	0,0,1,2,2,1,2,1	9	0	81·6
15 q	6 38	547	488	12 11	59	14 10	65·4	53·9	9 41	11·5	9 18	1147	1132	13 44	15	1,0,2,2,2,2,1,0	10	0	81·6
16 d	4 9	*579*	354	23 55	225	14 8	76·7	45·9	21 16	30·8	17 2	*1340*	1105	23 55	*235*	0,3,3,4,5,5,4,5	29	2	81·7
17 d	16 55	559	*259*	0 25	*300*	15 41	71·1	*31·1*	2 26	*40·0*	17 19	1205	*1029*	3 50	176	6,5,4,2,3,4,2,1	27	2	81·7
18	0 40	543	472	11 54	71	19 30	69·7	52·1	1 15	17·6	20 7	1183	1130	3 51	53	3,2,2,2,2,2,3,3	19	1	81·6
19 d	20 23	551	463	21 11	88	15 22	*77·4*	41·8	21 31	35·6	18 26	1201	1083	24 0	118	2,1,2,2,4,4,4,4	23	1	81·6
20	0 1	560	484	13 8	76	12 54	66·5	48·2	0 16	18·3	17 29	1149	1080	0 5	69	4,3,2,2,1,2,1,0	15	1	81·6
21 q	23 53	536	482	11 40	54	14 1	64·5	54·6	9 9	9·9	8 30	1149	1137	10 51	12	0,0,1,2,2,0,1,1	7	0	81·6
22 q	20 18	543	501	11 15	42	13 30	64·4	55·2	9 34	9·2	8 10	1147	1130	12 20	17	0,0,1,2,2,0,0,2	7	0	81·6
23 q	0 19	541	499	11 22	42	13 30	64·5	54·8	9 38	9·7	8 15	1143	1130	13 30	13	1,0,0,2,1,2,0,1	7	0	81·6
24	6 8	556	488	12 9	68	14 0	68·5	54·8	9 17	13·7	19 10	1153	1124	10 58	29	2,2,2,2,3,2,2,1	16	1	81·7
25	7 23	551	480	13 38	71	13 12	67·9	47·5	21 54	20·4	22 0	1154	1129	10 5	25	1,2,1,3,2,2,2,3	16	1	81·7
26	0 13	571	480	12 38	91	14 25	67·5	42·1	2 19	25·4	16 10	1154	1099	1 55	55	4,3,2,2,2,2,1,2	18	1	81·7
27	20 11	544	497	12 48	47	13 15	66·9	52·5	0 12	14·4	0 20	1149	1128	13 3	21	2,3,1,2,1,1,1,1	12	0	81·8
28	19 39	547	511	11 53	*36*	14 11	69·0	49·6	23 11	19·4	16 10	1153	1120	12 30	33	1,1,1,2,3,2,1,3	14	1	81·8
Mean	- -	550	471	- -	80	- -	68·4	50·5	- -	17·9	- -	1167	1118	- -	50	-	-	0·64	81·6

q denotes an international quiet day and d an international disturbed day.

TERRESTRIAL MAGNETIC FORCE: HORIZONTAL COMPONENT

Mean values for periods of sixty minutes ending at exact hours, G.M.T.

121 ESKDALEMUIR (H) — 16,000γ (0·16 C.G.S. unit) + — MARCH

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1 q	536	533	532	531	532	532	532	536	532	516	505	509	512	520	520	525	528	530	533	536	540	540	541	532	528
2 d	533	533	529	528	539	540	540	534	591	583	528	519	508	453	456	493	507	532	564	564	569	503	418	377	518
3 d	354	374	426	406	470	489	482	472	413	365	394	393	379	428	488	444	490	445	531	411	225	303	229	22	*393*
4	415	277	401	488	411	496	484	464	370	382	460	472	480	482	472	488	488	495	501	524	476	488	500	498	459
5	497	496	496	500	508	512	508	505	508	504	484	488	490	492	482	495	497	504	511	513	520	516	520	519	503
6 q	516	525	512	517	524	524	524	525	513	493	476	472	484	488	496	496	508	512	521	520	524	527	525	526	510
7	525	527	526	526	528	533	543	524	508	484	469	469	471	459	488	497	516	535	540	535	537	533	532	532	514
8 d	542	535	535	552	548	547	552	536	512	449	446	452	464	448	612	654	654	628	528	484	456	411	397	322	511
9	382	442	412	453	475	476	445	425	397	429	417	421	429	446	464	481	488	484	505	509	521	516	511	509	460
10 q	511	512	512	516	516	523	520	512	491	472	460	459	475	488	488	503	515	512	518	531	532	532	532	529	507
11 q	529	528	531	532	534	535	532	529	505	489	485	476	475	490	501	511	516	521	529	532	535	534	532	532	517
12	545	544	544	545	547	570	561	555	534	505	498	488	489	502	531	518	513	529	535	539	545	544	538	542	532
13	541	542	541	535	545	545	547	541	528	512	496	497	490	506	514	516	529	529	545	552	545	553	550	548	531
14	548	540	544	546	555	550	549	549	539	533	517	515	516	500	533	576	584	501	522	528	525	526	521	524	*535*
15 d	529	520	521	520	519	505	500	477	415	407	406	479	498	519	489	584	619	438	462	481	482	481	475	493	492
16	483	489	491	487	489	490	489	487	477	473	469	470	467	476	481	497	517	541	540	512	493	482	470	467	489
17	417	474	485	454	501	479	485	481	466	463	462	470	489	496	504	501	507	521	521	519	531	521	521	517	491
18	521	510	513	505	505	516	517	513	501	490	482	477	494	499	501	498	530	514	524	538	532	521	521	525	510
19	533	536	515	520	517	521	522	513	497	490	483	483	497	496	501	508	525	537	533	534	541	513	522	517	515
20	533	536	526	529	534	533	536	529	518	505	490	490	496	513	517	521	525	529	538	525	528	533	529	529	523
21 q	532	526	526	534	529	533	531	525	517	502	497	504	506	518	535	529	531	529	538	541	546	541	525	518	526
22	526	529	535	557	557	569	544	520	505	481	490	495	501	513	518	501	530	529	528	530	529	537	537	540	525
23	539	541	533	533	537	538	536	536	533	508	509	514	527	505	533	567	590	510	501	514	509	509	521	519	528
24	521	521	523	489	481	557	517	513	505	486	481	475	489	505	514	523	521	526	525	526	526	526	537	530	513
25	530	528	529	531	527	521	517	508	498	471	478	481	482	493	509	518	521	526	535	544	540	531	526	525	515
26	534	505	534	512	513	517	517	509	487	488	476	459	481	517	528	544	549	534	517	529	533	550	525	522	516
27	523	529	521	526	524	535	545	533	509	482	481	485	481	489	497	520	537	542	543	545	532	529	540	524	520
28 d	507	478	431	478	530	530	504	461	438	470	461	456	481	551	570	573	609	592	541	501	470	470	481	483	503
29	500	496	497	508	505	506	505	497	482	465	450	461	474	481	502	515	521	526	544	534	517	518	526	501	501
30	437	517	517	482	504	509	513	501	493	477	459	454	441	474	497	513	513	533	568	548	531	521	523	529	502
31	529	526	517	500	512	526	530	529	509	473	483	481	474	489	506	514	513	521	528	524	526	527	527	525	512
Mean	505	505	508	511	517	524	520	511	493	479	*474*	476	482	491	508	520	*532*	523	528	523	513	511	505	493	506

MAGNETIC DECLINATION (WEST)

Mean values for periods of sixty minutes ending at exact hours, G.M.T.

122 ESKDALEMUIR (D) — 11° + — MARCH

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′
1 q	59·3	57·0	57·4	56·9	56·4	56·2	56·6	56·5	56·2	56·4	59·2	63·0	65·5	67·1	65·8	64·0	62·2	61·6	61·2	61·0	61·0	60·1	57·4	57·9	59·8
2 d	58·1	57·0	55·3	56·5	58·5	54·0	54·0	55·7	53·8	62·1	60·9	64·6	71·0	69·1	68·5	69·3	65·5	70·2	69·0	74·2	64·3	61·0	48·5	34·7	60·7
3 d	42·6	35·8	34·2	53·8	54·9	55·5	62·0	61·9	62·1	60·9	64·6	64·7	64·8	71·6	70·0	70·9	68·7	64·6	56·5	42·1	35·8	49·6	51·4	52·0	*56·3*
4	48·2	51·7	54·8	52·9	65·4	71·5	72·0	63·7	55·4	68·3	57·6	60·7	63·0	64·2	61·9	62·6	60·5	58·4	47·4	52·3	55·3	55·7	60·3	60·0	59·3
5	60·1	62·8	60·0	58·3	57·8	57·7	57·6	56·7	55·1	54·6	56·5	59·3	62·7	65·4	64·2	62·8	60·8	60·5	60·0	59·8	59·3	58·4	59·1	58·5	59·5
6 q	57·9	59·7	58·3	58·5	58·1	57·6	57·2	56·4	54·7	53·8	55·7	61·0	66·0	67·8	66·5	63·4	62·3	61·0	60·0	59·4	58·3	57·6	59·0	59·0	59·5
7	59·2	59·4	60·0	59·6	58·9	57·6	56·5	53·1	51·9	52·7	56·5	61·9	69·7	70·6	69·2	66·5	63·9	62·9	61·8	60·6	60·5	59·4	58·9	58·7	60·4
8 d	58·4	59·1	60·8	62·0	59·2	59·6	64·6	63·5	60·2	64·5	63·7	69·2	73·5	73·3	78·1	66·5	67·0	65·5	61·0	61·9	52·0	52·0	52·2	49·3	*62·4*
9	56·3	44·1	45·8	47·3	52·1	54·8	57·5	67·1	56·5	58·2	61·0	63·2	68·3	69·1	68·3	64·5	63·8	61·9	59·0	57·8	54·7	54·7	58·3	59·1	58·5
10 q	59·3	59·8	59·2	58·3	58·1	58·2	57·3	56·1	54·6	54·9	57·7	62·6	68·7	70·2	67·3	65·7	63·6	61·2	59·6	59·9	59·4	59·1	59·0	58·2	60·3
11 q	58·8	59·6	59·1	58·5	58·4	57·9	56·9	55·2	53·8	54·4	57·4	62·2	65·5	67·3	66·0	64·5	62·6	61·1	60·9	60·6	60·1	59·9	59·4	59·3	60·0
12	59·7	57·3	58·3	58·3	61·2	60·2	55·5	54·6	53·8	53·8	56·3	62·8	66·5	67·4	69·4	68·2	63·6	61·8	61·7	61·1	61·0	60·0	59·1	58·5	60·4
13	58·7	58·3	58·2	58·5	58·3	57·9	57·7	56·0	53·8	54·7	56·7	61·5	65·4	67·5	69·0	67·3	65·5	60·7	60·8	60·8	60·3	60·8	60·0	58·3	60·3
14	60·1	60·2	60·2	61·1	62·5	61·1	57·3	53·8	55·5	56·6	57·3	61·9	65·4	65·5	66·2	65·5	64·7	59·6	61·0	61·1	58·3	60·1	59·0	56·6	60·4
15 d	59·3	56·2	57·0	56·9	58·0	60·9	62·0	57·6	50·2	45·5	45·4	59·7	68·7	69·8	71·8	74·3	67·4	64·7	63·6	60·9	60·8	58·0	58·3	55·3	60·1
16	56·6	57·3	57·0	57·4	57·4	56·6	54·9	54·6	54·8	55·6	58·1	61·9	63·9	66·4	66·5	66·9	62·9	60·3	53·9	60·3	60·2	56·8	49·1	47·5	58·2
17	53·6	51·8	51·1	53·8	51·8	57·6	60·2	58·2	53·3	56·5	60·9	62·7	62·9	62·0	63·2	62·0	60·8	56·8	57·3	59·2	55·5	56·5	57·7	56·6	57·6
18	57·2	58·6	57·4	59·4	58·3	56·6	55·6	54·5	53·7	54·3	56·3	59·9	63·0	64·8	64·6	64·5	60·3	60·2	60·1	60·0	56·7	57·4	58·7	59·0	58·8
19	58·2	54·5	54·4	54·6	55·3	55·5	53·1	53·7	53·7	53·5	55·4	59·3	63·7	64·9	64·9	63·9	62·0	59·3	60·0	59·2	54·6	56·6	57·0	54·9	57·6
20	58·2	55·6	52·9	54·7	53·7	54·8	53·6	54·3	53·0	52·9	55·5	60·8	63·6	65·5	66·5	65·7	64·3	61·9	60·8	57·1	57·2	57·9	56·4	54·5	58·0
21 q	55·1	57·0	57·2	58·2	58·0	56·9	55·8	54·7	53·9	55·7	58·5	64·7	66·3	67·0	67·6	65·2	64·3	61·1	60·7	60·3	60·0	57·5	52·6	55·4	59·3
22	57·5	57·3	55·7	57·3	54·3	51·8	54·6	53·6	54·8	59·8	62·9	66·2	67·8	68·8	68·9	64·7	64·1	61·2	52·0	55·3	59·1	60·5	60·1	59·1	59·5
23	58·1	56·7	54·6	55·7	55·6	58·9	56·5	55·4	55·2	57·4	60·1	66·6	68·4	67·1	66·4	62·1	59·2	57·6	59·3	60·2	57·7	57·9	56·9	58·3	59·2
24	59·9	54·7	53·7	61·0	65·1	68·9	68·2	55·6	53·0	53·8	57·2	58·8	61·9	63·7	63·8	63·6	61·6	60·7	60·1	58·5	60·0	59·2	58·5	61·0	60·1
25	59·1	58·1	56·6	55·7	56·2	57·6	58·3	56·4	54·8	55·1	58·0	61·9	65·0	66·2	65·0	63·8	61·2	59·2	59·0	56·6	57·7	55·5	55·3	56·4	58·7
26	48·4	55·7	57·4	61·0	62·8	59·2	59·0	56·6	53·9	56·3	58·7	63·7	68·0	69·7	68·8	68·2	64·6	60·9	63·3	59·2	60·1	56·5	60·1	55·5	60·3
27	55·0	55·6	52·9	55·6	55·5	53·8	58·2	58·3	54·4	58·4	63·6	63·6	65·8	66·4	65·2	64·9	64·1	62·4	59·4	55·2	60·5	58·0	62·3	61·0	59·6
28 d	51·1	38·1	37·0	42·3	46·8	54·8	59·2	68·4	62·8	65·4	63·3	65·2	68·7	67·4	67·0	64·0	62·8	54·5	58·7	64·6	63·8	56·0	54·4	57·2	58·1
29	52·2	54·8	54·7	53·8	54·0	54·3	53·6	52·0	51·9	53·9	56·9	62·7	65·8	65·1	66·3	65·3	63·6	62·0	58·4	55·0	56·9	57·3	56·6	51·2	57·4
30	58·2	52·0	41·6	48·3	44·6	49·2	51·9	52·0	51·8	52·0	58·3	62·7	66·6	68·8	70·7	69·9	65·7	60·6	60·6	58·1	59·1	59·2	59·1	57·7	57·4
31	57·3	55·4	56·9	54·1	57·4	57·6	59·2	53·8	54·5	58·3	59·0	64·6	67·2	68·2	66·4	65·3	60·9	58·9	59·4	60·0	59·3	59·3	58·7	58·3	59·6
Mean	56·5	55·2	*54·5*	56·1	56·9	57·6	57·9	56·8	54·7	56·5	58·4	62·7	66·2	*67·3*	67·2	65·7	63·4	61·1	59·6	59·1	58·1	57·7	57·2	56·1	59·3

TERRESTRIAL MAGNETIC FORCE: VERTICAL COMPONENT

Mean values for periods of sixty minutes ending at exact hours, G.M.T.

123 ESKDALEMUIR (V) — 44,000γ (0·44 C.G.S. unit) + — MARCH

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1 q	1126	1129	1135	1136	1138	1138	1138	1137	1137	1136	1131	1126	1125	1130	1139	1144	1147	1148	1147	1145	1143	1144	1144	1144	1138
2 d	1142	1141	1137	1137	1137	1137	1136	1135	1116	1096	1112	1114	1129	1165	1180	1188	1186	1208	1298	1376	1333	1293	1162	1064	1172
3 d	1077	1069	1050	1058	1096	1134	1137	1137	1146	1162	1189	1212	1226	1237	1251	1239	1278	1304	1257	1161	1034	970	1026	1076	1147
4	1068	976	1004	1081	1087	985	1028	1083	1119	1134	1142	1152	1162	1184	1204	1195	1184	1186	1191	1166	1166	1166	1153	1149	*1124*
5	1147	1138	1134	1149	1154	1154	1155	1157	1158	1159	1160	1159	1159	1162	1167	1166	1166	1162	1160	1159	1159	1160	1159	1158	1157
6 q	1155	1151	1153	1155	1154	1153	1153	1154	1157	1159	1149	1138	1137	1140	1145	1156	1156	1156	1155	1154	1154	1154	1153	1153	1152
7	1153	1153	1151	1150	1151	1150	1148	1152	1148	1144	1141	1132	1134	1140	1142	1153	1155	1153	1152	1153	1153	1152	1153	1153	1149
8 d	1148	1148	1147	1136	1135	1136	1130	1135	1138	1141	1142	1155	1189	1207	1268	1340	1339	1322	1316	1310	1272	1177	1121	1119	*1195*
9	1029	1055	1075	1068	1101	1113	1137	1128	1143	1178	1189	1201	1207	1207	1206	1215	1213	1212	1201	1200	1179	1168	1166	1163	1156
10 q	1162	1160	1161	1161	1165	1163	1164	1168	1172	1170	1168	1159	1153	1162	1165	1160	1162	1167	1166	1164	1161	1150	1160	1160	1163
11 q	1158	1158	1159	1159	1159	1159	1159	1164	1165	1162	1158	1150	1149	1149	1154	1158	1159	1159	1158	1156	1155	1154	1154	1155	1157
12	1150	1148	1152	1152	1147	1137	1141	1144	1148	1151	1148	1143	1141	1136	1138	1154	1157	1155	1154	1153	1153	1154	1154	1153	1148
13	1153	1153	1153	1153	1151	1150	1153	1159	1160	1156	1149	1141	1140	1137	1138	1142	1149	1154	1151	1149	1152	1149	1146	1140	1149
14	1137	1138	1140	1143	1140	1140	1143	1153	1154	1156	1160	1160	1166	1186	1195	1218	1259	1227	1185	1174	1177	1172	1167	1166	1169
15 d	1155	1135	1137	1144	1142	1137	1131	1142	1153	1166	1171	1178	1165	1195	1255	1297	1352	1266	1218	1201	1195	1192	1190	1165	1187
16	1168	1170	1168	1159	1169	1169	1158	1167	1165	1162	1161	1165	1166	1167	1181	1202	1222	1233	1225	1210	1214	1200	1162	1124	1179
17	1082	1075	1098	1081	1083	1110	1121	1138	1155	1159	1160	1165	1171	1172	1182	1184	1183	1188	1185	1175	1170	1164	1160	1159	1147
18	1153	1155	1159	1155	1154	1160	1165	1168	1167	1161	1161	1159	1153	1154	1164	1170	1187	1179	1164	1162	1170	1163	1164	1161	1163
19	1157	1147	1147	1144	1148	1156	1159	1161	1162	1161	1155	1150	1148	1149	1151	1154	1164	1171	1168	1169	1167	1166	1166	1164	1158
20	1148	1130	1133	1135	1123	1121	1135	1143	1148	1149	1149	1141	1141	1144	1150	1156	1162	1163	1165	1171	1171	1162	1163	1161	1149
21 q	1156	1155	1154	1153	1152	1149	1148	1148	1147	1147	1140	1132	1135	1137	1143	1154	1160	1162	1156	1154	1154	1159	1161	1158	1151
22	1158	1159	1157	1136	1100	1070	1089	1117	1128	1135	1130	1126	1130	1136	1147	1159	1156	1165	1180	1176	1167	1155	1153	1152	1141
23	1148	1140	1138	1143	1144	1141	1138	1137	1137	1135	1130	1125	1134	1141	1151	1198	1278	1257	1201	1179	1179	1171	1158	1148	1160
24	1147	1136	1117	1082	1089	1082	1095	1126	1141	1148	1152	1150	1147	1146	1150	1154	1159	1159	1160	1159	1156	1155	1147	1131	1137
25	1130	1144	1149	1150	1148	1148	1145	1144	1143	1144	1142	1138	1141	1144	1151	1159	1166	1170	1169	1162	1154	1150	1138	1100	1147
26	1112	1099	1083	1077	1083	1095	1116	1129	1141	1146	1149	1154	1160	1175	1195	1207	1219	1224	1213	1196	1176	1141	1125	1142	1148
27	1143	1136	1141	1131	1141	1135	1129	1133	1137	1135	1135	1131	1136	1143	1152	1157	1167	1179	1195	1188	1183	1184	1153	1140	1150
28 d	1112	1111	1086	1010	1074	1114	1135	1131	1137	1142	1156	1172	1196	1248	1274	1279	1275	1273	1252	1246	1228	1200	1167	1143	1173
29	1130	1150	1159	1159	1160	1162	1168	1170	1167	1160	1156	1148	1153	1165	1172	1182	1187	1192	1207	1190	1168	1171	1154	1146	1166
30	1072	1088	1105	1069	1069	1122	1148	1154	1159	1153	1144	1147	1148	1148	1152	1166	1188	1214	1225	1226	1202	1182	1169	1161	1150
31	1153	1136	1114	1116	1137	1147	1148	1160	1159	1159	1144	1148	1160	1183	1207	1206	1198	1183	1168	1165	1165	1162	1161	1161	1160
Mean	1133	1129	1129	*1125*	1130	1131	1137	1144	1149	1151	1151	1151	1155	1164	1176	1187	*1198*	1197	1192	1185	1175	1163	1152	1144	1156

DAILY EXTREMES OF TERRESTRIAL MAGNETIC ELEMENTS, MAGNETIC CHARACTER FIGURES AND TEMPERATURE IN MAGNET HOUSE

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	TERRESTRIAL MAGNETIC ELEMENTS															3-hr. range indices K	Sum of K indices	Magnetic character of day (0-2)	Temperature in magnet house 200 +
	Horizontal force					Declination					Vertical force								
	Maximum 16,000γ +		Minimum 16,000γ +		Range	Maximum 11° +		Minimum 11° +		Range	Maximum 44,000γ +		Minimum 44,000γ +		Range				
	h. m.	γ	h. m.	γ	γ	h. m.	′	h. m.	′	′	h. m.	γ	h. m.	γ	γ				°A.
1 q	0 36	546	10 24	484	62	13 43	67·3	4 26	55·4	*11·9*	17 55	1149	12 33	1125	24	2,0,2,1,2,1,1,2	11	0	81·8
2 d	19 1	697	23 57	322	375	19 6	97·9	23 12	29·9	68·0	19 13	1438	23 45	1027	411	1,3,5,5,5,4,6,7	36	2	81·8
3 d	18 29	*1059*	23 33	*-345*	*1404*	23 36	*112·4*	21 1	6·1	*106·3*	18 28	*1450*	23 24	*855*	*595*	6,4,5,5,5,5,9,9	48	2	81·8
4	19 5	571	1 59	164	407	5 1	83·6	0 1	20·5	63·1	14 32	1209	2 0	896	313	7,6,5,5,3,3,5,3	37	2	81·8
5	20 39	524	14 9	480	*44*	13 46	67·2	9 33	53·0	14·2	14 6	1170	2 3	1125	45	3,2,3,2,3,2,2,1	18	0	81·8
6 q	21 40	532	11 10	469	63	12 56	68·9	8 37	53·2	15·7	9 1	1161	12 30	1136	25	2,1,2,2,1,2,1,1	12	0	81·8
7	18 0	571	12 54	434	137	13 21	74·2	7 50	50·1	24·1	16 24	1156	11 53	1129	27	1,2,3,3,4,3,3,2	21	1	81·8
8 d	17 11	840	23 5	-38	878	12 56	85·2	23 48	*5·0*	80·2	17 20	1384	23 2	999	385	2,3,4,4,7,7,6,8	41	2	81·8
9	1 17	566	0 45	223	343	0 44	83·6	0 23	25·9	57·7	15 14	1219	0 39	915	304	7,5,4,3,3,3,4,3	32	1	81·8
10 q	5 50	532	11 0	457	75	13 40	71·4	8 40	53·8	17·6	8 15	1173	12 30	1151	22	2,2,2,1,2,2,2,1	14	0	81·6
11 q	24 0	544	12 16	460	84	14 5	69·0	8 24	52·5	16·5	8 0	1167	12 47	1149	*18*	0,0,2,2,2,1,1,1	9	0	81·6
12	5 48	583	12 16	456	127	15 10	73·7	8 1	50·3	23·4	15 34	1161	13 5	1135	26	2,3,3,3,4,4,2,2	23	1	81·6
13	19 30	582	12 24	447	135	13 59	72·7	8 24	51·5	21·2	8 14	1164	13 59	1135	29	2,2,3,3,4,3,3,2	22	1	81·6
14	16 32	640	13 25	474	166	16 34	70·6	7 58	50·4	20·2	16 45	1269	1 0	1136	133	2,3,3,3,4,5,2,2	24	1	81·6
15 d	15 54	763	8 53	346	417	15 46	80·5	10 36	35·0	45·5	16 1	1377	6 0	1129	248	2,3,5,5,4,7,3,3	32	1	81·7
16	18 28	577	12 23	458	119	15 21	67·7	22 19	42·1	25·6	18 5	1240	23 54	1117	123	2,2,2,2,2,4,4,4	22	1	81·7
17	18 3	544	0 48	328	216	0 40	70·0	0 1	46·4	23·6	17 33	1190	1 2	1015	175	5,4,3,2,2,3,3,3	25	1	81·8
18	20 57	606	11 37	473	133	15 20	67·0	20 55	45·6	21·4	16 38	1190	0 32	1150	40	3,2,1,2,3,3,4,4	22	1	81·8
19	20 12	569	11 10	481	88	13 10	67·3	20 7	48·3	19·0	17 41	1172	3 14	1142	30	3,2,2,1,2,3,3,2	18	0	81·9
20	20 4	546	12 24	485	61	14 47	67·4	4 21	49·9	17·5	19 54	1177	5 20	1119	58	3,3,2,2,2,2,3,2	19	0	82·0
21 q	20 29	552	11 57	490	62	14 42	70·2	22 45	51·1	19·1	16 56	1166	11 40	1130	36	2,1,1,2,3,2,2,3	16	0	82·1
22	5 15	581	9 35	474	107	13 58	70·1	5 43	48·3	21·8	18 32	1185	5 20	1066	119	2,4,3,3,2,3,3,1	21	1	82·1
23	16 27	623	18 9	482	141	14 56	72·7	8 0	52·0	20·7	16 33	1300	11 27	1120	180	2,3,3,4,4,5,3,3	27	1	82·1
24	5 52	591	4 37	455	136	5 56	72·4	2 31	46·0	26·4	19 16	1164	3 27	1065	99	4,5,4,2,2,3,2,2	24	1	82·1
25	20 0	569	9 19	470	99	13 27	66·9	24 0	48·3	18·6	18 0	1172	23 35	1093	79	2,2,2,2,2,2,3,3	18	0	82·1
26	21 26	589	11 17	446	143	13 37	70·7	0 25	46·8	23·9	17 19	1227	4 4	1074	153	4,3,3,3,3,3,3,4	26	1	82·2
27	22 7	599	9 14	468	131	12 40	67·2	21 47	50·4	16·8	21 43	1203	24 0	1123	80	3,3,3,3,2,3,3,4	24	1	82·3
28 d	16 52	656	2 36	390	266	13 20	71·0	2 28	30·7	40·3	17 31	1303	2 56	964	339	5,5,5,3,5,5,5,5	38	2	82·4
29	19 22	557	10 28	445	112	14 29	67·7	19 41	45·3	22·4	18 19	1209	0 2	1118	91	3,2,2,2,3,2,4,3	21	1	82·4
30	19 1	588	0 49	398	190	15 22	72·7	2 20	35·8	36·9	19 28	1233	0 55	1027	206	5,4,3,3,4,4,4,3	30	1	82·4
31	14 12	540	12 12	463	77	13 6	70·5	7 47	51·0	19·5	14 46	1210	3 8	1103	107	3,3,3,3,3,3,1,0	19	1	82·4
Mean	- -	608	- -	388	219	- -	73·9	- -	42·9	30·9	- -	1225	- -	1078	146	-	-	0·87	81·9

q denotes an international quiet day and d an international disturbed day.

TERRESTRIAL MAGNETIC FORCE: HORIZONTAL COMPONENT

Mean values for periods of sixty minutes ending at exact hours, G.M.T.

125 ESKDALEMUIR (H) — 16,000γ (0·16 C.G.S. unit) + — APRIL

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1 q	521	521	518	517	520	524	521	518	501	477	462	462	465	487	506	515	529	536	541	540	541	542	540	540	514
2	539	536	536	539	535	538	547	540	529	504	490	481	485	502	497	513	536	540	538	541	540	544	545	542	527
3	540	541	544	554	536	533	540	532	508	486	474	474	488	508	524	542	541	533	544	553	560	554	553	548	530
4	544	533	530	534	542	549	562	545	513	473	462	461	474	484	516	507	545	550	529	538	526	525	502	505	519
5	517	518	519	517	521	529	535	529	510	482	470	470	481	488	508	522	528	545	533	533	540	541	543	543	518
6	538	542	548	545	542	549	549	533	510	477	462	466	478	498	517	526	512	537	537	549	544	540	541	545	524
7	540	537	540	537	539	542	544	536	517	494	478	474	468	489	489	549	526	528	538	538	540	541	549	544	524
8	539	540	540	537	541	544	544	538	522	502	470	467	477	490	505	517	534	541	544	546	545	565	573	565	529
9 d	533	533	533	540	545	525	512	477	471	445	445	434	470	489	474	502	501	517	533	533	529	533	517	519	505
10	520	517	521	513	517	525	521	517	509	487	470	462	473	481	498	521	528	540	543	541	538	539	541	560	516
11	541	525	523	524	519	530	525	517	505	490	474	474	474	493	533	550	565	560	541	541	536	538	540	527	523
12	521	521	526	529	525	525	514	509	493	476	477	473	478	504	513	533	541	557	549	544	545	548	540	533	520
13	525	529	540	528	529	529	533	529	552	493	478	474	493	504	533	529	552	554	553	553	549	554	542	533	529
14	540	536	534	540	541	535	529	527	530	525	501	501	506	525	529	546	540	544	567	559	559	541	537	540	535
15	549	528	512	525	536	550	542	525	516	493	481	498	497	513	537	550	561	545	549	560	561	540	536	539	531
16	533	545	542	525	528	531	529	517	512	505	493	492	489	508	522	541	519	549	561	552	536	537	533	530	526
17 d	512	520	529	534	533	535	532	533	519	502	496	498	553	561	518	622	536	570	657	661	406	488	233	460	521
18 d	468	458	466	464	470	481	493	486	478	474	467	455	477	482	525	573	470	473	494	521	529	505	489	502	*487*
19 d	501	493	490	498	505	506	501	481	482	465	446	457	492	491	481	513	548	550	529	524	524	529	538	540	503
20 d	536	525	527	533	545	506	525	520	518	486	477	478	473	473	497	509	517	557	556	544	526	527	530	527	517
21 q	530	531	529	529	530	529	521	509	513	505	497	494	502	510	517	521	529	534	538	539	541	541	537	541	524
22 q	538	536	536	536	537	538	529	513	498	491	489	494	502	514	526	540	545	546	548	548	545	545	549	528	
23 q	554	545	544	544	545	548	544	537	525	509	498	497	509	517	533	544	549	559	557	562	557	556	554	551	539
24 q	550	549	549	549	550	548	545	538	526	505	486	477	483	501	525	538	546	552	552	554	555	554	553	552	535
25	553	550	550	552	553	554	553	548	533	518	505	488	497	514	533	564	600	560	576	561	572	561	561	566	*547*
26	565	565	552	546	549	546	545	545	545	532	517	509	516	517	533	556	554	574	576	561	565	557	559	545	*547*
27	544	541	544	546	548	553	561	558	544	513	497	485	494	516	537	525	551	561	561	569	549	545	545	546	539
28	549	546	538	541	529	537	542	537	522	504	489	485	505	521	521	537	545	549	552	561	552	553	552	545	534
29	541	539	540	544	545	548	549	540	530	516	496	504	533	520	528	521	538	550	552	553	553	552	549	551	537
30	556	552	544	547	543	551	544	537	521	509	485	486	505	505	525	527	541	553	577	554	557	548	546	548	536
Mean	535	532	531	532	533	535	535	526	516	495	481	*479*	491	503	516	535	537	545	551	*551*	541	541	531	538	525

MAGNETIC DECLINATION (WEST)

Mean values for periods of sixty minutes ending at exact hours, G.M.T.

126 ESKDALEMUIR (D) — 11° + — APRIL

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′
1 q	58·3	57·6	56·9	56·5	56·5	55·6	54·3	52·9	53·5	55·0	57·0	62·2	64·4	68·6	68·3	66·5	64·7	62·3	61·0	60·3	59·3	55·6	56·6	58·3	59·3
2	58·3	58·3	58·4	59·1	57·1	56·8	56·6	53·5	51·7	51·9	54·9	59·3	65·3	67·7	66·4	65·1	62·3	58·5	58·8	59·8	60·1	59·8	59·3	59·1	59·1
3	58·4	59·0	60·0	62·0	54·8	55·2	53·7	51·2	50·2	50·4	55·6	61·0	65·5	69·0	68·9	68·0	64·6	61·1	60·8	60·0	59·9	60·6	57·5	55·8	59·3
4	53·0	55·6	56·0	56·4	57·3	59·4	57·4	55·6	53·6	55·5	61·9	67·9	71·7	68·9	68·7	65·6	59·1	59·2	58·3	56·2	52·0	54·5	52·0	51·5	58·6
5	53·8	54·7	56·6	57·2	56·6	56·3	54·0	51·3	50·2	51·1	56·5	62·9	67·4	66·5	65·5	62·5	59·3	57·6	57·7	58·5	58·2	59·2	58·4	58·4	57·9
6	58·7	58·9	61·7	57·4	54·5	55·7	53·8	53·7	51·3	54·6	58·2	63·6	68·3	69·1	68·0	63·8	59·3	58·2	56·7	56·5	59·4	58·3	59·0	59·2	59·1
7	58·7	58·3	58·8	57·5	57·5	57·0	55·6	53·7	51·4	51·6	56·6	60·2	66·5	70·0	68·4	67·8	62·0	60·0	59·9	60·0	59·7	59·4	58·6	54·6	59·3
8	57·5	58·4	57·6	57·4	57·3	56·5	54·7	52·2	50·5	51·7	56·3	60·1	68·2	70·6	68·3	65·5	62·1	59·9	59·3	59·7	59·6	60·2	60·1	59·9	59·3
9 d	55·4	53·7	53·0	56·3	58·6	52·7	56·6	56·5	52·0	56·5	57·5	57·4	65·5	67·1	62·7	60·2	58·1	58·4	59·0	59·3	59·0	59·9	58·3	56·7	57·9
10	56·4	57·5	59·3	56·7	56·1	56·3	54·7	56·5	53·8	51·1	52·5	56·6	62·0	65·0	66·1	65·3	63·1	62·0	60·1	60·0	59·7	58·5	58·4	60·1	58·7
11	53·7	53·7	56·0	54·9	57·0	54·9	53·0	50·2	49·7	52·2	54·7	61·6	64·4	66·5	68·2	67·0	64·5	60·2	57·6	59·2	59·3	59·6	57·4	54·3	57·9
12	55·6	56·0	55·4	54·4	54·7	54·6	54·4	52·1	51·1	53·1	56·5	62·0	67·1	71·9	70·0	67·8	65·4	61·9	57·3	57·5	60·6	55·6	50·2	51·5	58·2
13	53·7	55·1	49·3	53·4	53·8	55·6	54·4	52·2	51·0	53·5	57·3	62·8	67·0	66·4	68·2	64·8	63·3	60·9	59·8	58·8	57·4	53·9	56·1	55·3	57·7
14	52·8	50·7	50·9	51·5	54·3	54·4	54·7	52·9	52·9	54·3	58·5	63·3	65·4	67·7	66·1	65·3	61·0	60·0	60·2	58·3	53·8	54·7	55·8	56·3	*57·3*
15	54·7	48·9	51·8	57·5	56·1	56·4	56·3	53·0	52·0	55·5	61·7	65·3	67·1	68·9	66·6	65·9	62·8	60·1	58·2	59·2	59·7	57·4	58·3	56·9	58·8
16	57·0	58·4	57·5	55·3	54·7	53·9	53·8	55·6	54·8	54·3	56·6	61·0	64·9	65·9	66·5	65·0	62·0	60·9	56·1	56·5	56·2	58·2	57·5	52·2	58·1
17 d	48·5	52·6	57·4	53·8	54·4	55·5	54·8	54·5	54·4	56·6	58·8	61·1	65·3	65·9	74·7	80·0	75·6	73·9	76·5	71·8	50·9	63·5	32·6	38·2	*59·6*
18 d	49·5	47·5	47·8	49·3	51·1	53·3	55·8	57·5	59·3	63·0	64·6	69·0	69·2	71·1	72·9	67·2	66·4	62·6	60·3	61·1	61·1	41·7	54·4	57·6	58·9
19 d	57·4	55·5	61·9	56·2	53·8	53·9	53·7	53·9	53·7	55·5	57·4	61·5	67·2	68·1	67·1	64·3	62·7	57·1	59·7	59·9	60·3	59·8	59·3	54·7	58·9
20 d	53·9	55·8	56·0	55·8	56·8	61·9	61·1	55·7	54·1	54·9	58·5	60·9	63·6	63·9	63·5	62·8	60·8	61·0	54·9	54·7	58·4	59·3	58·4	57·8	58·5
21 q	58·3	57·6	57·6	58·2	60·8	57·4	56·7	54·8	53·7	53·9	56·4	60·3	61·9	62·5	61·9	61·0	60·2	59·3	59·0	58·5	58·4	58·3	58·4	58·1	58·5
22 q	57·5	57·4	57·4	56·8	56·9	55·7	53·8	51·8	50·2	51·6	55·2	59·2	63·8	66·4	65·3	63·0	61·1	59·6	58·4	58·3	58·3	58·7	58·5	59·1	58·1
23 q	58·3	57·7	58·4	58·2	58·1	54·4	52·1	50·6	50·4	53·6	58·3	63·3	67·3	68·1	67·5	64·9	62·8	61·0	60·1	60·3	60·1	59·7	59·1	58·3	59·3
24 q	58·2	57·9	57·9	57·8	57·3	56·1	54·7	52·1	50·7	52·3	55·4	60·2	66·0	69·0	68·5	65·9	63·5	61·9	60·5	60·0	59·8	59·3	58·8	58·2	59·3
25	58·0	57·5	57·3	58·0	56·6	56·1	54·5	52·9	51·0	52·0	56·0	59·1	63·8	66·4	66·3	64·5	63·4	64·1	64·4	60·9	61·4	60·7	60·5	60·3	59·3
26	59·3	60·1	57·3	56·5	55·3	53·4	51·7	51·3	51·2	51·5	53·6	59·0	63·9	67·0	65·9	64·9	63·7	62·3	60·4	59·0	59·7	57·7	57·1	54·1	58·2
27	56·8	56·7	56·8	56·0	56·1	55·2	53·8	53·9	50·4	52·5	53·7	57·2	61·5	64·0	64·7	62·1	60·2	59·7	57·4	56·1	56·6	58·8	59·0	58·9	57·4
28	59·0	58·2	57·5	59·1	59·2	57·8	52·5	50·2	50·5	51·5	55·6	60·4	64·3	67·4	65·7	63·8	61·7	59·9	58·9	58·4	56·7	59·0	58·4	56·9	58·4
29	58·5	58·5	57·9	58·4	59·8	56·6	55·1	52·1	52·2	57·3	61·7	62·1	68·4	68·3	66·0	63·2	60·6	59·4	58·6	59·0	59·2	59·0	58·7	59·2	*59·6*
30	60·1	57·1	56·6	57·4	60·2	59·2	55·7	53·0	52·5	55·2	58·4	61·9	65·4	67·1	66·9	64·5	62·2	60·2	59·2	57·0	57·5	59·2	58·8	58·7	59·3
Mean	56·3	56·2	56·6	56·5	56·4	55·9	54·8	53·3	*52·1*	53·8	57·2	61·4	65·7	*67·5*	67·1	65·3	62·6	60·8	59·6	59·2	58·4	58·0	56·9	56·3	58·7

TERRESTRIAL MAGNETIC FORCE: VERTICAL COMPONENT

Mean values for periods of sixty minutes ending at exact hours, G.M.T.

127 ESKDALEMUIR (V) — 44,000γ (0·44 C.G.S. unit) + — APRIL

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1 q	1161	1160	1160	1160	1160	1159	1159	1156	1154	1147	1142	1135	1134	1126	1141	1148	1149	1153	1157	1158	1159	1159	1156	1153	1152
2	1153	1154	1152	1148	1148	1149	1150	1153	1152	1147	1142	1142	1141	1150	1153	1152	1159	1170	1166	1156	1154	1154	1153	1153	1152
3	1153	1153	1149	1131	1129	1141	1146	1148	1144	1137	1130	1123	1117	1122	1129	1135	1141	1148	1148	1149	1149	1149	1146	1141	1140
4	1133	1141	1147	1148	1147	1145	1142	1146	1146	1142	1137	1132	1146	1168	1170	1177	1204	1219	1218	1201	1185	1165	1149	1138	1160
5	1123	1139	1147	1156	1159	1160	1165	1167	1166	1156	1148	1149	1155	1161	1160	1161	1161	1160	1165	1164	1160	1156	1154	1151	1156
6	1149	1149	1143	1105	1111	1120	1130	1142	1149	1149	1144	1142	1142	1148	1155	1166	1173	1171	1170	1165	1159	1156	1153	1148	1147
7	1148	1149	1152	1152	1151	1150	1153	1157	1159	1153	1143	1129	1125	1135	1146	1164	1184	1177	1156	1153	1153	1153	1150	1150	1152
8	1149	1150	1152	1153	1151	1150	1153	1154	1155	1145	1137	1125	1126	1137	1152	1149	1150	1152	1150	1149	1149	1143	1141	1117	1145
9 d	1071	1118	1131	1137	1136	1124	1122	1135	1137	1147	1154	1165	1148	1149	1161	1170	1179	1171	1167	1167	1165	1161	1162	1162	1147
10	1159	1159	1150	1153	1159	1160	1160	1150	1150	1149	1147	1143	1141	1143	1147	1152	1154	1158	1158	1158	1155	1154	1153	1137	1152
11	1126	1137	1147	1152	1147	1137	1141	1148	1149	1150	1148	1142	1140	1137	1142	1158	1174	1189	1189	1176	1167	1160	1155	1147	1152
12	1147	1152	1153	1149	1152	1147	1143	1144	1147	1147	1141	1136	1134	1138	1153	1161	1172	1179	1178	1166	1155	1155	1143	1136	1151
13	1140	1137	1120	1135	1140	1141	1142	1145	1148	1141	1131	1124	1123	1129	1143	1156	1161	1167	1167	1166	1161	1154	1149	1147	1144
14	1142	1137	1137	1136	1132	1134	1136	1142	1143	1136	1132	1132	1136	1142	1147	1154	1160	1155	1153	1165	1165	1154	1150	1149	1145
15	1135	1125	1117	1111	1111	1116	1124	1133	1135	1129	1125	1129	1135	1137	1147	1155	1168	1170	1166	1157	1157	1162	1149	1146	*1139*
16	1144	1141	1125	1138	1143	1146	1148	1147	1141	1134	1125	1125	1129	1142	1152	1164	1165	1165	1177	1176	1167	1160	1155	1142	1148
17 d	1131	1135	1135	1129	1130	1118	1125	1129	1129	1129	1129	1123	1114	1131	1133	1159	1220	1257	1321	1307	1177	1190	970	1149	1153
18 d	1197	1165	1171	1173	1172	1171	1168	1168	1171	1177	1176	1192	1201	1219	1222	1270	1270	1215	1190	1183	1183	1197	1168	1161	*1191*
19 d	1161	1161	1142	1152	1165	1164	1162	1162	1161	1159	1153	1165	1171	1183	1183	1173	1182	1200	1184	1171	1166	1162	1159	1158	1167
20 d	1137	1153	1158	1158	1152	1141	1117	1122	1129	1132	1142	1150	1153	1154	1158	1161	1159	1161	1195	1195	1177	1166	1161	1160	1154
21 q	1160	1160	1160	1159	1147	1137	1143	1148	1153	1154	1153	1148	1146	1148	1153	1153	1154	1155	1155	1154	1153	1154	1154	1154	1152
22 q	1154	1154	1157	1156	1157	1157	1159	1157	1150	1148	1137	1130	1130	1134	1137	1142	1146	1148	1150	1151	1150	1149	1150	1150	1148
23 q	1148	1149	1152	1153	1151	1153	1154	1153	1149	1142	1131	1129	1125	1129	1137	1141	1143	1143	1147	1144	1147	1145	1146	1147	1144
24 q	1148	1148	1149	1150	1152	1153	1150	1148	1142	1139	1135	1131	1130	1129	1135	1138	1138	1144	1147	1144	1144	1144	1144	1144	1143
25	1145	1147	1147	1148	1149	1149	1147	1148	1144	1136	1130	1124	1123	1123	1130	1146	1162	1160	1162	1160	1149	1147	1143	1142	1144
26	1141	1135	1138	1146	1150	1153	1152	1147	1137	1130	1129	1125	1123	1129	1136	1137	1153	1167	1172	1177	1170	1159	1149	1149	1146
27	1150	1150	1150	1151	1153	1153	1152	1153	1148	1140	1137	1135	1131	1135	1147	1156	1156	1155	1161	1166	1166	1155	1150	1147	1150
28	1147	1145	1148	1148	1144	1131	1130	1134	1139	1135	1123	1111	1112	1127	1145	1146	1153	1156	1154	1153	1158	1153	1148	1147	1141
29	1146	1147	1148	1149	1148	1148	1147	1147	1142	1135	1135	1134	1132	1142	1149	1149	1153	1155	1156	1154	1152	1152	1149	1148	1147
30	1143	1135	1135	1140	1140	1130	1134	1136	1139	1141	1135	1125	1122	1127	1137	1143	1146	1149	1153	1160	1156	1153	1149	1149	1141
Mean	1145	1146	1146	1146	1146	1145	1145	1147	1147	1143	1139	1137	*1136*	1143	1150	1158	1166	1169	*1171*	1168	1160	1157	1145	1147	1150

DAILY EXTREMES OF TERRESTRIAL MAGNETIC ELEMENTS, MAGNETIC CHARACTER FIGURES AND TEMPERATURE IN MAGNET HOUSE

128 ESKDALEMUIR — APRIL

	TERRESTRIAL MAGNETIC ELEMENTS												3-hr. range indices K	Sum of K indices	Magnetic character of day (0-2)	Temperature in magnet house 200 +
	Horizontal force					Declination			Vertical force							
	Maximum 16,000γ +		Minimum 16,000γ +		Range	Maximum 11° +	Minimum 11° +	Range	Maximum 44,000γ +		Minimum 44,000γ +		Range			
	h. m.	γ	γ	h. m.	γ	h. m.	′	′	h. m.	γ	γ	h. m.	γ			°A.
1 q	20 58	549	454	12 0	95	13 38	70·4	51·1	7 22	19·3	0 11	1161	1123	13 10	38	0,1,2,2,3,2,1,2	13	0	82·5
2	16 48	555	477	11 30	78	13 20	69·1	50·2	7 43	18·9	17 50	1172	1137	12 24	35	1,1,2,2,3,3,2,1	15	1	82·6
3	19 59	586	470	11 28	116	15 5	70·7	48·9	8 39	21·8	0 20	1154	1117	12 40	37	2,3,2,2,3,3,3,3	21	1	82·6
4	0 1	571	450	12 22	121	12 8	73·1	47·4	20 29	25·7	18 11	1222	1130	0 7	92	3,3,3,3,4,3,3,3	25	1	82·6
5	17 57	565	459	11 23	106	12 33	67·9	49·5	8 43	18·4	7 45	1167	1112	0 28	55	3,2,2,3,2,3,3,2	20	1	82·6
6	2 59	573	411	11 57	162	13 17	70·1	48·3	7 59	21·8	16 41	1176	1100	3 35	76	3,4,3,4,4,3,3,2	26	1	82·6
7	15 23	557	456	12 7	101	13 37	71·0	50·8	8 40	20·2	16 32	1189	1124	11 50	65	1,2,2,3,3,3,2,3	19	1	82·6
8	21 50	650	457	10 59	193	13 43	71·8	49·2	9 4	22·6	8 10	1156	1057	24 0	99	0,1,2,3,3,3,1,5	18	1	82·8
9 d	0 21	565	415	11 21	150	13 6	69·1	47·6	0 9	21·5	16 23	1180	1056	0 3	124	4,3,3,3,4,3,2,2	24	1	82·8
10	23 26	567	454	11 45	113	14 48	67·3	49·9	9 10	17·4	6 5	1161	1129	24 0	32	2,2,3,2,3,2,1,3	18	1	82·9
11	16 31	572	454	11 54	118	14 21	69·5	47·7	8 13	21·8	18 1	1196	1123	0 20	73	3,2,2,3,3,3,2,3	21	1	82·9
12	21 58	574	468	11 54	106	13 48	72·9	43·8	21 52	29·1	18 5	1184	1132	13 1	52	1,2,2,2,3,3,3,4	20	1	83·1
13	17 38	560	470	11 37	90	14 11	68·9	47·4	2 11	21·5	19 1	1168	1117	2 15	51	3,2,2,2,3,2,2,2	18	1	83·1
14	20 43	583	493	11 0	90	13 20	68·5	46·8	20 37	21·7	19 41	1167	1130	4 40	37	2,2,2,2,2,2,4,3	19	1	83·1
15	16 28	572	473	10 10	99	13 44	69·8	46·6	1 32	23·2	16 50	1173	1101	4 0	72	3,3,2,2,3,3,2,3	21	1	83·1
16	18 28	571	481	12 36	90	14 29	67·4	49·1	24 0	18·3	18 56	1180	1123	2 22	57	3,1,2,2,3,3,3,3	20	1	83·2
17 d	21 0	*1054*	*-492*	22 1	*1546*	22 15	*95·0*	*-28·2*	22 8	*123·2*	18 42	*1365*	*710*	22 10	*655*	4,3,1,1,5,6,9,9	38	2	83·3
18 d	15 9	600	381	1 12	219	14 53	76·1	26·4	21 28	49·7	16 0	1286	1159	1 52	127	5,3,1,4,5,5,4,5	32	1	83·3
19 d	23 53	585	413	10 54	172	13 11	70·0	49·4	23 19	20·6	17 30	1202	1126	2 48	76	4,3,3,4,3,4,2,4	27	1	83·3
20 d	19 0	589	462	12 51	127	12 31	66·4	45·3	18 58	21·1	18 55	1213	1113	6 40	100	3,4,4,3,3,4,4,1	26	1	83·3
21 q	23 39	550	491	11 49	*59*	12 56	62·8	50·9	7 53	*11·9*	0 1	1161	1136	5 13	25	1,2,3,1,1,1,1,1	11	0	83·4
22 q	23 41	552	485	11 36	67	13 12	66·5	49·3	8 28	17·2	7 12	1159	1129	11 50	30	1,0,2,2,1,2,0,0	8	0	83·5
23 q	19 36	565	497	11 52	68	13 23	68·4	50·1	7 51	18·3	6 20	1155	1124	12 29	31	1,2,1,2,2,2,1,1	12	0	83·5
24 q	21 0	557	474	11 40	83	13 35	69·3	50·4	8 32	18·9	5 37	1153	1129	12 50	*24*	0,0,1,2,2,1,0,0	6	0	83·5
25	16 37	644	485	11 42	159	15 18	67·4	50·7	8 34	16·7	18 57	1165	1120	12 52	45	0,0,1,3,2,5,4,2	17	1	83·5
26	17 1	619	505	11 29	114	13 32	68·1	49·4	6 53	18·7	19 38	1178	1122	12 22	56	2,1,2,2,3,4,3,3	20	1	83·6
27	19 42	581	476	11 33	105	14 24	67·2	46·1	8 43	21·1	19 15	1167	1130	12 40	37	2,2,3,3,4,3,3,0	20	1	83·6
28	19 22	570	481	11 33	89	14 20	68·2	47·4	7 24	20·8	20 40	1161	1110	12 0	51	2,3,3,2,3,3,3,2	21	1	83·7
29	12 22	572	481	10 22	91	12 24	70·7	50·1	8 22	20·6	18 18	1159	1128	12 23	31	1,2,2,3,4,3,2,1	18	1	83·7
30	18 28	588	474	10 40	114	14 20	68·2	50·4	8 39	17·8	19 30	1161	1119	12 35	42	2,2,3,3,3,3,3,2	21	1	83·7
Mean	- -	593	432	- -	161	- -	70·1	45·4	- -	24·7	- -	1183	1106		77	-	-	0·87	83·1

q denotes an international quiet day and d an international disturbed day.

TERRESTRIAL MAGNETIC FORCE: HORIZONTAL COMPONENT

Mean values for periods of sixty minutes ending at exact hours, G.M.T.

129 ESKDALEMUIR (H) — 16,000γ (0·16 C.G.S. unit) + — MAY

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1	545	554	552	541	543	544	527	534	521	505	501	502	521	509	510	529	557	559	536	552	553	548	541	536	534
2 q	530	529	525	521	527	533	529	523	517	509	501	506	514	529	533	537	544	549	548	545	546	548	549	545	531
3	544	542	540	540	538	541	533	529	518	502	494	497	513	537	548	559	569	565	555	551	547	545	545	545	537
4	546	548	545	542	541	534	526	521	514	497	497	501	510	525	538	540	548	556	576	557	556	556	556	550	537
5	550	553	555	558	547	547	536	518	517	506	496	502	516	529	541	569	565	568	565	560	557	557	549	552	542
6	548	548	548	547	548	545	539	533	525	513	501	509	529	536	565	555	545	553	569	549	554	549	550	561	542
7	545	541	545	547	548	545	539	530	519	501	498	498	501	522	540	556	559	560	558	557	557	553	548	549	538
8 q	549	549	548	548	548	545	537	530	521	511	509	501	510	521	540	550	561	560	553	555	557	556	553	552	540
9 q	549	547	544	546	549	545	534	524	512	506	507	513	521	521	534	544	541	550	558	565	565	561	557	554	539
10 q	553	552	552	552	553	554	545	534	521	510	506	502	514	524	537	553	564	566	572	568	565	553	541	542	543
11	540	541	544	545	542	541	533	522	514	505	491	497	499	506	525	552	570	588	596	585	561	549	541	539	539
12	537	541	557	529	537	529	514	503	497	487	493	490	501	515	537	546	560	571	564	564	565	561	544	550	533
13	549	533	536	538	534	525	524	526	533	534	524	517	504	505	517	544	568	592	592	595	572	554	530	553	542
14 d	517	485	510	497	506	521	529	507	504	498	477	510	514	509	504	505	526	532	549	577	558	547	554	537	520
15 d	541	538	529	509	529	541	529	525	510	477	493	509	520	538	534	505	527	542	550	560	576	561	548	524	530
16 d	525	493	501	501	489	514	482	480	490	489	449	464	480	521	517	517	537	561	558	573	554	552	534	541	*513*
17	541	534	517	535	533	529	510	512	505	486	490	501	494	493	533	566	563	580	588	576	568	565	540	541	533
18	541	545	533	524	521	530	525	510	500	505	509	506	508	514	549	554	584	638	619	580	545	542	541	548	540
19	519	520	525	525	525	521	497	488	491	484	478	473	485	510	497	515	544	566	565	557	560	552	545	536	520
20	537	535	537	536	533	533	518	509	510	515	512	505	511	525	540	548	545	549	552	560	568	560	560	557	536
21	552	553	550	552	549	538	526	514	518	521	516	514	519	517	536	549	561	565	564	573	577	573	562	561	544
22	548	542	549	551	553	549	542	534	523	508	497	493	497	498	517	532	544	562	569	574	572	564	576	580	541
23 d	576	578	566	534	533	541	569	564	530	514	492	489	493	513	536	568	572	569	576	576	580	569	563	560	548
24 d	561	557	572	566	565	549	548	493	342	474	498	479	462	481	497	508	540	541	551	544	534	533	540	528	519
25	521	527	525	525	519	515	506	493	470	458	451	465	477	502	532	548	558	560	576	576	565	557	548	542	521
26	541	548	548	556	544	549	552	538	513	490	478	462	460	474	500	541	541	593	585	584	568	573	576	557	536
27	546	546	554	551	552	546	546	517	513	489	482	487	484	494	495	524	553	588	565	565	561	560	553	554	534
28	556	549	540	548	553	549	540	529	516	499	489	483	502	537	552	533	569	593	588	573	561	565	569	562	544
29	565	561	560	559	565	562	561	572	540	529	510	509	514	525	569	664	628	611	592	560	552	538	538	537	*559*
30 q	537	529	530	532	535	529	517	505	492	474	467	467	481	493	502	521	538	552	557	553	552	552	550	549	521
31	549	547	546	544	547	546	538	526	513	513	514	516	533	554	563	591	584	580	573	612	599	554	549	560	552
Mean	544	541	541	539	539	538	531	521	507	500	*494*	496	503	515	530	546	557	*568*	568	567	561	555	550	549	536

MAGNETIC DECLINATION (WEST)

Mean values for periods of sixty minutes ending at exact hours, G.M.T.

130 ESKDALEMUIR (D) — 11° + — MAY

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′
1	58·2	61·9	58·6	58·1	61·1	62·9	57·6	55·2	53·4	52·8	54·7	57·0	62·0	64·4	63·7	59·9	57·0	56·0	55·8	57·1	60·2	61·9	60·6	60·7	58·8
2 q	58·3	58·4	58·2	56·5	54·7	53·1	51·7	50·7	51·0	53·6	57·4	60·7	61·9	62·8	61·5	60·0	59·0	58·3	58·1	57·9	58·1	58·0	59·0	58·4	57·4
3	58·3	58·7	58·3	58·8	55·7	55·2	54·4	53·8	53·4	55·6	58·1	63·5	67·2	67·4	65·5	61·1	59·4	57·6	57·6	58·3	59·1	59·1	59·1	59·2	58·9
4	58·4	58·2	57·4	56·3	54·7	52·1	50·2	49·8	52·1	56·5	60·1	63·6	66·0	66·0	64·7	61·2	59·5	57·6	57·4	56·9	57·9	59·4	59·6	59·1	58·1
5	58·4	59·2	60·2	59·2	55·5	52·9	51·7	50·3	52·7	53·7	59·0	62·9	66·3	66·9	65·5	63·7	60·2	57·2	58·4	59·2	59·4	60·0	59·3	59·5	58·8
6	58·5	58·3	57·9	57·4	56·4	55·3	54·7	52·9	53·6	57·5	61·2	64·3	66·6	67·3	64·8	61·0	58·4	57·6	59·2	60·5	60·5	60·6	60·0	61·9	*59·4*
7	59·2	58·1	58·1	57·6	56·1	54·8	53·3	52·2	52·2	55·6	59·2	64·2	67·2	67·1	64·6	62·2	60·3	58·9	58·2	58·7	59·2	58·5	59·0	58·8	58·9
8 q	58·3	57·9	57·4	56·7	55·6	53·3	52·1	51·5	51·9	54·8	58·1	61·4	63·6	65·2	64·8	63·3	60·8	58·4	57·5	58·5	59·3	59·3	59·7	59·1	58·3
9 q	58·6	58·2	58·2	56·6	55·6	53·0	51·6	51·2	50·9	53·8	57·4	61·0	64·2	65·9	65·5	63·5	61·0	59·6	59·4	59·8	60·0	58·3	59·2	59·3	58·4
10 q	59·1	58·4	57·6	57·1	55·6	53·8	50·2	50·2	49·9	52·8	57·6	63·4	67·1	68·2	67·0	63·8	61·1	59·3	59·3	59·4	59·7	59·1	58·2	56·9	58·5
11	55·5	55·5	55·0	53·7	51·9	49·9	48·4	49·0	50·0	53·8	59·1	63·7	68·2	69·1	66·6	65·2	62·7	59·1	58·4	59·3	58·3	58·4	57·9	55·4	57·7
12	54·6	55·1	55·6	51·0	50·7	49·1	48·4	50·1	52·0	57·2	60·2	63·7	66·7	67·5	67·2	63·4	61·1	59·9	59·3	60·0	59·8	58·7	58·4	60·2	57·9
13	53·8	54·6	55·4	54·8	53·0	49·6	46·4	47·2	51·5	56·9	59·8	62·3	64·0	64·1	63·3	62·9	62·4	61·0	58·4	60·7	55·4	50·7	54·4	55·3	56·6
14 d	52·5	50·0	49·5	49·9	48·2	46·6	48·2	46·3	54·3	58·4	61·4	63·7	66·3	65·5	65·3	61·7	60·2	56·7	56·5	57·3	57·4	57·4	59·9	58·5	56·3
15 d	58·3	57·1	59·2	54·6	53·0	50·0	48·2	47·6	49·9	59·2	62·1	64·4	66·5	67·2	65·3	61·4	61·1	60·8	60·2	58·5	51·3	57·3	55·7	54·9	57·7
16 d	50·3	47·5	56·5	49·2	51·2	56·1	53·7	50·3	51·2	51·0	54·5	60·1	62·6	65·5	62·7	61·8	62·3	61·0	57·5	56·3	57·5	58·2	60·7	55·5	56·4
17	56·0	51·5	52·0	53·8	51·7	51·2	51·4	52·5	52·9	55·8	60·2	63·4	67·3	67·1	65·8	64·7	62·4	61·9	59·2	58·1	58·2	58·3	58·7	58·3	58·0
18	57·5	57·7	52·8	52·8	54·8	53·6	51·2	49·1	52·0	55·4	58·8	61·4	64·6	67·3	68·2	66·5	65·1	61·9	60·2	58·2	57·6	59·2	56·5	52·9	58·1
19	53·8	54·8	55·6	53·8	51·0	49·3	47·5	49·3	53·9	56·6	59·2	63·7	67·9	70·0	68·1	64·7	62·2	59·4	57·6	58·4	58·4	57·4	56·5	55·7	57·7
20	55·4	55·6	54·8	54·0	54·2	51·2	50·8	52·2	52·8	56·7	61·0	65·0	67·9	68·9	67·7	64·5	61·1	60·3	60·0	59·8	59·7	58·5	57·5	57·4	58·6
21	56·6	57·3	55·7	54·0	52·1	49·7	48·4	47·3	47·5	51·2	55·6	61·0	64·6	66·3	66·2	64·3	61·1	59·4	57·5	57·4	58·8	59·2	58·0	59·0	57·0
22	55·7	56·0	56·7	55·1	55·0	53·1	51·9	52·0	53·7	56·9	61·0	65·5	68·2	69·0	67·3	64·6	61·9	59·3	57·4	56·9	58·3	58·8	59·3	56·6	58·8
23 d	56·4	56·1	59·2	59·4	39·8	38·1	48·5	48·4	46·6	50·7	54·8	60·0	63·5	66·3	67·3	67·9	66·2	61·0	58·3	57·5	59·0	58·2	57·8	57·5	56·6
24 d	56·8	56·3	56·6	56·3	56·1	56·4	55·4	53·1	38·3	65·3	59·4	63·1	65·3	65·5	66·5	65·4	63·7	61·8	60·7	59·3	58·2	58·0	57·9	56·7	58·8
25	56·4	56·5	56·7	52·8	51·8	51·3	50·3	50·2	50·3	54·4	59·8	65·1	68·2	65·9	65·3	64·4	62·0	58·5	56·9	57·4	58·3	59·3	59·4	62·3	58·1
26	58·7	61·0	62·0	61·4	62·6	58·3	54·0	49·4	51·1	52·3	57·4	61·9	65·7	67·5	68·3	64·9	59·2	57·4	57·4	57·1	58·3	61·2	56·4	58·0	59·2
27	60·8	60·6	62·8	59·1	54·7	53·1	51·5	47·3	52·1	52·6	57·2	61·9	66·3	66·9	64·7	64·1	61·2	59·3	55·4	56·5	57·3	58·6	58·4	59·3	58·4
28	58·0	57·5	56·6	54·6	52·9	50·5	48·4	48·6	49·9	51·9	55·4	61·0	66·5	69·3	69·2	65·5	65·5	62·3	59·5	58·9	59·2	60·6	55·6	57·4	58·1
29	56·0	57·1	57·4	57·5	56·4	56·8	56·4	56·6	56·5	53·7	59·2	63·7	65·5	66·6	63·7	55·4	56·5	58·4	56·8	57·3	53·9	59·8	60·1	59·7	58·4
30 q	59·4	58·0	56·5	54·7	52·0	48·3	45·3	44·9	46·1	49·5	53·9	59·2	62·8	63·7	63·4	61·7	60·2	57·8	56·6	56·7	57·0	57·6	58·2	57·9	*55·9*
31	57·5	57·1	55·8	54·6	53·5	51·2	49·4	49·6	51·1	56·7	61·1	64·7	67·3	67·3	64·9	65·0	62·9	61·1	59·2	59·8	59·2	54·8	57·5	61·1	58·4
Mean	56·9	56·8	56·9	55·5	53·8	52·3	51·0	*50·3*	51·1	54·9	58·5	62·6	65·7	*66·7*	65·6	63·2	61·2	59·3	58·2	58·3	58·2	58·5	58·3	58·1	58·0

TERRESTRIAL MAGNETIC FORCE: VERTICAL COMPONENT

Mean values for periods of sixty minutes ending at exact hours, G.M.T.

131 ESKDALEMUIR (V) — 44,000γ (0·44 C.G.S. unit) + — MAY

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1	1147	1142	1135	1140	1148	1131	1131	1135	1138	1134	1129	1128	1129	1136	1146	1154	1160	1165	1165	1156	1149	1147	1148	1149	1143
2 q	1152	1153	1153	1154	1154	1156	1154	1152	1142	1129	1124	1117	1118	1124	1131	1136	1138	1142	1147	1148	1148	1147	1147	1146	1142
3	1147	1147	1148	1148	1147	1146	1143	1142	1140	1140	1131	1125	1124	1130	1136	1142	1147	1154	1154	1151	1148	1147	1147	1147	1143
4	1147	1147	1147	1148	1152	1154	1152	1148	1136	1124	1118	1118	1119	1128	1137	1143	1147	1147	1148	1154	1152	1143	1142	1143	1141
5	1144	1145	1145	1136	1137	1141	1141	1141	1135	1127	1125	1124	1125	1132	1138	1143	1154	1165	1161	1154	1152,	1147	1146	1144	1142
6	1146	1147	1147	1148	1150	1154	1149	1147	1141	1130	1126	1117	1117	1132	1149	1163	1168	1165	1160	1153	1148	1146	1144	1142	1145
7	1133	1139	1144	1148	1150	1150	1149	1145	1142	1131	1124	1123	1124	1134	1142	1147	1147	1148	1148	1147	1147	1145	1143	1143	1141
8 q	1143	1144	1147	1148	1148	1147	1146	1141	1134	1129	1124	1123	1122	1129	1136	1138	1142	1147	1148	1147	1143	1142	1142	1142	1140
9 q	1142	1143	1144	1144	1147	1149	1148	1142	1136	1121	1108	1106	1106	1112	1125	1136	1142	1144	1142	1143	1142	1142	1141	1140	1135
10 q	1140	1141	1142	1143	1147	1149	1150	1148	1141	1128	1118	1116	1118	1124	1135	1147	1156	1165	1165	1162	1155	1154	1150	1147	1143
11	1145	1143	1143	1143	1146	1147	1145	1141	1135	1118	1112	1107	1107	1118	1126	1141	1157	1171	1171	1171	1168	1158	1155	1152	1143
12	1145	1136	1105	1118	1130	1141	1147	1145	1137	1129	1124	1124	1128	1135	1142	1151	1158	1164	1162	1155	1154	1149	1147	1143	1140
13	1134	1139	1143	1144	1147	1150	1141	1130	1123	1114	1110	1108	1117	1128	1136	1141	1146	1155	1165	1166	1173	1149	1136	1124	1138
14 d	1112	1104	1088	1095	1081	1111	1129	1132	1122	1107	1106	1104	1130	1147	1153	1155	1158	1170	1167	1161	1159	1149	1141	1137	1130
15 d	1142	1142	1134	1088	1098	1122	1137	1137	1131	1126	1119	1124	1130	1147	1164	1181	1171	1156	1148	1154	1160	1147	1128	1100	1137
16 d	1102	1057	1023	1045	1072	1095	1118	1135	1136	1136	1136	1135	1138	1155	1182	1189	1172	1165	1170	1171	1165	1153	1124	1124	1129
17	1129	1122	1124	1128	1135	1143	1147	1145	1142	1136	1129	1128	1128	1135	1147	1161	1172	1173	1183	1179	1166	1143	1137	1141	1145
18	1138	1133	1126	1135	1141	1141	1141	1144	1142	1131	1125	1123	1127	1134	1143	1155	1166	1186	1191	1189	1179	1162	1155	1142	1148
19	1143	1145	1143	1137	1140	1137	1143	1145	1143	1129	1112	1107	1111	1123	1141	1148	1152	1153	1155	1154	1154	1148	1147	1147	1140
20	1147	1147	1147	1147	1143	1140	1141	1139	1138	1129	1123	1119	1128	1141	1147	1152	1153	1153	1148	1141	1142	1143	1146	1142	1141
21	1141	1140	1141	1142	1142	1143	1138	1135	1129	1117	1106	1102	1110	1123	1129	1134	1138	1145	1144	1145	1143	1141	1143	1139	1134
22	1137	1138	1141	1143	1146	1148	1148	1146	1143	1135	1118	1102	1106	1120	1130	1141	1144	1148	1153	1152	1147	1141	1138	1135	1137
23 d	1137	1138	1131	1077	1075	1100	1093	1101	1112	1107	1105	1105	1107	1112	1119	1124	1129	1140	1144	1145	1140	1138	1137	1137	*1119*
24 d	1137	1139	1136	1137	1141	1137	1130	1124	1140	1136	1129	1131	1146	1154	1165	1160	1160	1160	1155	1159	1158	1155	1153	1153	1146
25	1155	1153	1149	1151	1159	1155	1158	1153	1142	1141	1131	1124	1137	1144	1144	1154	1162	1171	1171	1176	1172	1161	1155	1148	1153
26	1148	1148	1141	1134	1130	1125	1131	1133	1134	1129	1128	1130	1133	1147	1162	1172	1180	1189	1185	1173	1161	1147	1128	1129	1147
27	1135	1138	1134	1141	1135	1146	1147	1151	1143	1130	1125	1125	1129	1143	1160	1162	1167	1169	1175	1168	1161	1149	1148	1144	1147
28	1141	1142	1143	1147	1151	1155	1154	1147	1139	1129	1122	1119	1126	1137	1161	1177	1177	1176	1174	1166	1155	1145	1136	1135	1148
29	1135	1137	1142	1147	1150	1149	1148	1141	1138	1136	1131	1131	1135	1149	1170	1210	1180	1257	1248	1220	1208	1179	1164	1157	*1165*
30 q	1154	1154	1156	1157	1159	1157	1158	1154	1147	1142	1130	1130	1134	1137	1144	1147	1148	1148	1146	1144	1145	1143	1145	1144	1147
31	1145	1145	1145	1145	1146	1147	1147	1141	1137	1129	1119	1118	1118	1125	1130	1138	1154	1162	1166	1161	1169	1166	1153	1141	1144
Mean	1140	1138	1135	1134	1137	1141	1142	1141	1137	1128	1121	*1119*	1123	1133	1144	1153	1156	1163	*1163*	1160	1157	1149	1144	1141	1142

DAILY EXTREMES OF TERRESTRIAL MAGNETIC ELEMENTS, MAGNETIC CHARACTER FIGURES AND TEMPERATURE IN MAGNET HOUSE

132 ESKDALEMUIR — MAY

	TERRESTRIAL MAGNETIC ELEMENTS																3-hr. range indices K	Sum of K indices	Magnetic character of day (0-2)	Temperature in magnet house 200 +
	Horizontal force					Declination				Vertical force										
	Maximum 16,000γ +		Minimum 16,000γ +		Range	Maximum 11° +		Minimum 11° +		Range	Maximum 44,000γ +		Minimum 44,000γ +		Range				
	h. m.	γ	h. m.	γ	γ	h. m.	′	h. m.	′	′	h. m.	γ	h. m.	γ	γ					°A.
1	17 50	573	13 17	490	83	5 22	66·8	8 18	51·1	15·7	18 3	1168	12 33	1124	44	2,3,3,2,3,3,3,2	21	1	83·7
2 q	22 15	557	10 38	498	*59*	13 52	62·9	7 20	50·2	*12·7*	5 20	1156	11 44	1117	39	1,2,0,1,2,0,1,1	8	0	83·7
3	16 23	572	11 2	490	82	13 41	68·3	8 21	52·3	16·0	18 16	1155	11 52	1123	32	1,2,2,1,3,2,2,1	14	0	83·9
4	18 22	584	9 34	485	99	12 53	66·4	7 15	49·4	17·0	19 40	1155	11 10	1117	38	1,1,2,2,2,1,3,1	13	0	83·9
5	18 54	582	10 26	490	92	13 39	67·1	7 47	49·7	17·4	17 50	1166	12 10	1123	43	2,3,2,2,2,3,3,1	18	1	83·9
6	18 27	581	10 15	487	94	13 8	68·3	7 58	52·1	16·2	16 48	1170	12 2	1113	57	0,1,1,2,3,3,3,2	15	1	84·0
7	0 12	569	11 0	494	75	13 9	68·2	7 0	52·1	16·1	4 53	1153	11 42	1121	32	3,0,1,2,2,2,1,0	11	0	84·0
8 q	16 20	565	11 18	498	67	13 43	65·4	7 45	50·6	14·8	5 2	1149	12 23	1121	*28*	0,0,1,1,2,2,1,0	7	0	84·1
9 q	20 38	570	9 25	505	65	13 21	66·4	8 12	50·1	16·3	5 58	1149	12 3	1105	44	0,1,1,1,1,2,2,0	8	0	84·1
10 q	18 18	574	11 14	499	75	13 48	68·5	6 42	49·0	19·5	18 2	1166	11 26	1116	50	0,0,1,2,2,2,1,2	10	0	84·2
11	18 51	604	10 19	489	115	13 1	69·6	6 15	47·6	22·0	18 3	1173	12 10	1106	67	1,0,0,2,3,3,3,2	14	1	84·3
12	18 2	578	11 43	477	101	13 17	68·0	6 9	47·8	20·2	17 53	1165	2 35	1099	66	3,3,2,2,3,2,2,3	20	1	84·3
13	18 50	616	12 19	494	122	13 19	64·8	7 3	44·8	20·0	20 44	1179	11 0	1107	72	3,2,3,2,3,4,4,4	25	1	84·4
14 d	19 55	587	1 42	462	125	12 9	68·3	5 57	43·2	25·1	17 53	1173	4 7	1063	110	4,3,3,3,4,3,3,2	25	1	84·4
15 d	20 42	597	9 25	470	127	13 29	69·2	7 9	44·0	25·2	15 31	1185	10 77	1077	108	3,3,3,3,4,4,4,4	28	1	84·4
16 d	19 30	585	10 30	425	160	13 22	67·3	1 4	42·5	24·8	15 10	1196	*1004*	2 42	*192*	4,4,4,4,4,4,3,4	31	1	84·4
17	17 57	597	13 2	474	123	13 11	68·3	7 0	49·2	19·1	18 50	1184	1121	1 50	63	3,3,3,3,4,3,3,3	25	1	84·4
18	18 1	658	8 10	493	165	14 20	69·1	7 19	47·6	21·5	18 2	1200	1122	11 23	78	3,2,2,2,3,5,5,3	25	1	84·4
19	17 12	575	11 9	459	116	13 52	70·8	6 3	46·6	24·2	18 46	1157	1106	11 50	51	2,2,3,2,3,3,2,2	19	1	84·3
20	20 52	573	11 30	497	76	13 36	69·3	6 9	50·2	19·1	16 55	1158	1117	11 9	41	1,1,2,2,3,2,2,2	15	0	84·4
21	20 1	585	12 12	509	76	13 42	66·9	7 13	45·7	21·2	17 50	1147	1100	11 18	47	2,2,2,2,2,2,2,2	16	0	84·4
22	22 50	632	10 59	489	143	13 0	69·6	6 26	51·4	18·2	19 2	1155	1101	11 31	54	2,1,0,2,2,2,1,4	14	0	84·3
23 d	18 18	589	10 33	477	112	15 19	69·0	5 1	33·0	36·0	19 12	1148	1046	4 0	102	3,5,4,3,3,3,2,1	24	1	84·3
24 d	6 43	644	8 29	*224*	*420*	9 10	*78·1*	*23·2*	8 26	*54·9*	14 47	1167	1118	7 28	49	3,3,7,5,4,3,3,3	31	2	84·3
25	19 10	585	10 21	445	140	12 22	69·3	48·5	6 55	20·8	19 26	1178	1120	11 43	58	3,2,3,3,4,2,2,3	22	1	84·3
26	17 18	615	12 6	433	182	14 1	70·9	47·5	7 43	23·4	17 47	1194	1122	5 32	72	3,3,3,4,4,4,3,3	27	1	84·3
27	17 20	613	10 33	473	140	2 10	67·7	44·3	7 32	23·4	18 13	1176	1124	11 13	52	3,3,3,3,3,4,2,2	23	1	84·4
28	17 11	631	11 40	474	157	13 44	72·5	47·0	6 24	25·5	15 28	1183	1117	11 22	66	2,2,1,3,4,5,3,3	23	1	84·3
29	15 30	*687*	12 41	496	191	13 51	66·9	51·2	20 18	15·7	17 15	*1262*	1129	10 11	133	2,2,3,3,5,5,4,2	26	1	84·3
30 q	18 17	561	11 10	465	96	13 25	63·9	43·7	7 12	20·2	4 10	1159	1129	10 52	30	2,2,1,2,1,2,1,1	12	0	84·3
31	19 26	631	8 14	496	135	13 4	68·7	47·7	8 16	21·0	20 52	1176	1114	12 19	62	1,1,2,3,3,4,4,4	22	1	84·3
Mean	- -	596	- -	473	123	- -	68·3	46·9	- -	21·4	- -	1171	1107	- -	64	-	-	0·68	84·2

q denotes an international quiet day and d an international disturbed day.

TERRESTRIAL MAGNETIC FORCE: HORIZONTAL COMPONENT
Mean values for periods of sixty minutes ending at exact hours, G.M.T.

133 ESKDALEMUIR (H) — 16,000γ (0·16 C.G.S. unit) + — JUNE

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1 d	528	531	511	521	496	514	507	486	473	452	449	455	470	485	517	529	539	545	553	544	539	540	539	541	511
2 q	542	541	541	542	542	533	517	507	500	489	479	474	482	493	511	521	541	553	551	552	553	555	563	552	526
3	550	543	544	537	534	548	542	535	519	507	505	510	517	528	537	544	550	555	561	568	569	558	557	558	541
4	561	558	556	556	554	551	538	525	514	518	521	521	537	549	559	561	582	581	565	572	570	561	557	559	551
5 d	557	561	561	559	557	558	553	518	502	539	555	543	538	550	548	562	577	628	649	608	604	583	565	517	*562*
6	476	511	513	515	516	509	499	492	488	488	489	499	509	514	523	528	538	544	555	549	548	549	538	535	518
7	537	534	537	537	535	534	521	508	501	487	504	516	530	514	523	565	572	578	564	578	578	570	528	506	536
8	497	508	534	497	514	510	504	495	492	477	474	475	493	509	533	538	536	595	574	570	552	548	544	536	521
9	526	529	531	537	511	506	501	503	504	488	467	467	479	497	517	536	553	580	572	571	567	554	532	538	524
10	540	538	540	529	524	536	527	521	506	481	478	490	507	531	532	533	542	556	569	581	580	547	547	542	532
11	542	543	530	537	531	528	532	513	507	506	501	496	506	530	551	556	555	566	586	561	557	548	549	547	537
12 q	547	549	551	546	537	526	526	533	528	520	520	520	521	529	553	561	560	576	592	582	561	560	557	542	546
13	529	540	540	537	541	537	525	517	515	510	504	502	493	505	534	534	552	606	609	580	571	589	567	534	540
14 d	497	510	497	446	494	505	485	481	458	426	450	462	481	497	496	514	532	576	580	582	581	554	548	552	*509*
15	541	524	517	537	536	525	515	506	497	489	486	481	509	508	521	544	552	561	568	561	565	557	553	545	529
16 q	545	542	538	543	544	540	533	525	515	501	497	502	522	533	538	548	545	555	569	564	565	560	562	571	540
17 d	564	561	561	565	534	557	537	521	492	516	505	489	502	521	554	538	545	651	607	629	576	557	542	544	549
18	536	540	542	544	541	531	520	521	517	504	502	502	522	533	537	553	554	552	580	589	566	571	571	557	541
19	549	541	539	534	532	559	548	537	513	491	494	510	518	537	557	580	584	556	573	570	568	561	561	561	545
20	546	545	544	550	553	552	541	522	515	504	497	505	519	532	534	561	564	580	584	580	577	573	569	564	546
21	561	562	564	568	570	565	556	533	509	479	480	498	518	530	541	551	560	578	570	576	566	573	573	561	548
22	560	565	566	565	568	560	551	543	517	505	502	513	527	551	549	569	588	615	584	584	596	593	569	569	559
23	576	553	557	561	565	562	553	549	525	506	510	526	526	533	584	609	593	577	572	557	557	557	560	561	555
24	565	557	557	557	559	553	542	533	518	516	508	524	536	537	545	544	565	590	585	588	584	575	565	572	553
25 d	569	557	541	551	554	517	527	518	502	509	493	493	529	510	510	533	547	571	584	576	577	563	545	537	538
26	532	531	529	542	548	545	550	537	520	513	506	495	514	537	536	540	533	575	564	565	561	565	550	533	538
27 q	532	549	549	549	553	552	541	529	523	517	510	510	515	532	541	545	544	556	568	576	570	565	559	558	543
28	554	553	548	549	553	549	545	533	520	505	503	501	510	537	552	561	562	573	585	569	570	562	560	560	546
29 q	561	558	558	553	553	546	540	529	529	517	510	513	513	520	530	539	555	564	573	578	574	572	569	566	547
30	562	536	544	549	553	549	521	525	527	510	513	520	524	529	532	541	557	571	561	578	574	571	568	561	545
Mean	543	542	541	540	540	539	530	520	508	499	*497*	500	512	524	537	548	556	575	*577*	575	569	563	556	549	539

MAGNETIC DECLINATION (WEST)
Mean values for periods of sixty minutes ending at exact hours, G.M.T.

134 ESKDALEMUIR (D) — 11° + — JUNE

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′
1 d	65·2	52·2	50·5	46·6	47·9	50·1	49·3	43·9	45·0	48·0	56·6	60·2	64·6	64·7	63·4	61·0	58·7	56·2	54·9	55·6	61·8	59·0	59·1	58·8	55·6
2 q	58·5	58·0	56·7	55·4	52·6	50·2	48·2	48·3	49·6	52·8	56·7	60·8	65·2	67·1	67·3	64·6	61·3	57·5	54·7	55·5	56·6	57·7	58·5	59·2	57·2
3	60·0	59·6	59·9	61·9	56·4	52·0	46·8	46·2	48·5	53·9	59·1	64·5	68·7	70·2	68·2	64·2	61·2	59·8	59·8	58·7	58·5	59·1	59·2	58·7	59·0
4	58·3	58·1	56·5	54·6	53·1	52·0	50·6	52·0	54·8	59·0	62·3	64·6	66·2	66·3	64·6	61·2	60·4	57·9	58·4	59·7	59·7	59·4	58·7	59·0	58·6
5 d	58·3	58·1	57·1	54·6	53·9	52·5	50·3	46·2	58·7	63·9	66·9	67·4	67·2	67·4	66·5	67·1	64·1	65·3	65·6	62·2	61·6	62·0	58·3	55·6	60·5
6	49·3	56·2	53·8	52·5	50·2	48·1	47·5	48·5	49·7	53·6	57·4	61·0	64·8	64·7	63·5	62·6	61·7	60·2	59·0	58·0	56·6	54·9	55·7	53·0	55·9
7	54·0	53·2	53·5	53·9	52·9	49·3	47·3	48·4	50·2	53·8	58·5	63·7	68·1	68·3	68·9	67·7	63·0	60·3	59·2	59·7	59·1	53·9	52·9	45·3	56·9
8	47·1	49·1	46·7	46·6	54·4	50·3	52·0	50·4	47·5	48·2	51·1	55·8	61·9	63·8	66·4	65·6	64·1	64·7	61·0	56·5	59·0	60·2	56·5	53·3	*55·5*
9	54·4	56·4	59·7	54·9	50·4	54·5	53·7	50·2	50·2	51·7	53·9	59·2	62·8	64·4	64·5	64·1	62·8	61·0	57·6	59·6	59·3	57·5	58·8	56·1	57·4
10	54·9	53·9	50·0	47·8	53·1	52·0	47·6	49·0	50·2	51·0	56·2	58·3	61·8	65·4	65·0	64·6	62·8	61·0	60·7	59·5	56·6	56·9	57·4	57·8	56·4
11	57·5	54·6	53·1	54·4	52·5	50·4	48·9	48·4	52·7	53·6	57·4	61·0	63·5	65·4	65·2	64·3	62·3	61·1	60·4	58·8	59·2	59·3	58·4	57·4	57·5
12 q	57·0	57·4	56·7	55·3	52·5	50·1	52·0	51·3	51·2	54·5	57·9	60·3	62·8	64·1	64·5	63·6	61·5	61·4	61·2	59·7	58·3	57·5	56·5	53·9	57·5
13	53·1	55·2	53·4	53·0	52·9	50·2	48·5	50·1	53·0	52·9	54·8	58·3	56·3	63·7	67·2	65·6	63·4	62·6	60·2	56·6	58·3	61·6	58·7	41·1	56·3
14 d	51·2	47·2	50·4	59·2	41·2	42·0	46·5	45·7	48·4	49·8	61·1	62·3	63·6	63·7	63·4	62·9	60·8	58·4	56·2	59·9	59·8	59·5	59·3	59·7	*55·5*
15	54·0	50·6	50·7	52·9	47·5	43·9	44·8	45·5	48·4	51·1	55·3	60·8	63·7	65·5	66·4	64·6	65·1	63·7	59·7	57·5	57·8	57·9	57·6	56·6	55·9
16 q	55·6	54·8	54·3	53·5	52·7	50·9	49·7	48·5	49·6	52·3	56·5	61·0	71·0	67·6	65·6	63·9	62·5	60·5	60·1	58·7	58·1	57·7	58·0	58·7	57·6
17 d	57·5	57·4	57·9	64·0	59·3	57·6	50·2	50·0	53·0	58·2	59·3	64·6	64·6	66·7	69·9	71·6	71·2	74·8	62·2	60·2	59·3	58·4	59·3	59·3	*61·1*
18	56·0	55·1	54·0	53·8	54·0	54·0	54·6	55·1	54·9	58·3	62·3	67·4	69·9	70·1	68·2	65·4	63·5	61·8	60·3	60·9	59·3	58·6	52·2	55·5	59·4
19	57·5	57·6	53·8	54·8	54·7	47·2	47·2	47·7	48·9	54·3	59·3	62·3	66·1	68·3	68·6	67·9	63·1	59·1	57·8	59·2	58·7	57·1	56·7	53·5	57·6
20	54·9	57·0	56·7	57·4	56·3	54·1	52·6	50·7	52·5	55·3	57·9	60·5	63·6	64·7	66·2	66·2	64·2	62·6	59·3	56·7	57·2	58·1	58·5	58·6	58·4
21	58·2	59·9	58·9	57·3	55·4	53·1	50·3	49·0	47·4	48·9	54·0	61·8	67·0	67·9	66·6	64·4	61·4	60·0	58·4	59·0	58·9	58·3	60·1	57·1	58·1
22	57·3	59·2	55·5	56·5	50·3	48·3	47·4	46·7	47·7	52·6	56·4	60·8	66·3	67·9	66·5	64·4	61·9	60·5	59·1	58·2	58·3	59·7	57·9	59·2	57·4
23	60·9	62·7	58·3	53·7	53·7	54·7	54·0	54·8	55·2	58·4	60·8	63·7	66·2	66·5	68·2	63·5	61·4	61·5	59·4	57·9	57·9	58·4	58·4	59·3	59·6
24	59·6	59·2	60·0	58·3	53·6	52·4	53·1	52·7	52·7	54·6	57·4	58·7	61·9	61·9	62·9	62·8	62·8	62·0	61·1	60·2	60·0	56·7	57·9	59·3	58·4
25 d	59·4	59·0	59·1	58·4	51·7	58·3	60·8	59·2	55·3	54·8	55·5	59·6	61·1	62·6	60·4	60·0	60·3	60·0	58·9	58·5	59·4	58·4	57·3	57·9	58·6
26	56·0	53·9	53·6	53·8	54·8	56·1	56·7	54·7	53·8	56·1	57·3	62·0	62·8	65·5	64·0	62·9	61·6	61·0	59·7	60·1	60·5	61·0	59·3	58·3	58·6
27 q	58·0	56·4	55·3	53·1	51·1	49·3	48·3	48·6	49·2	51·1	53·8	58·3	61·9	63·7	64·5	63·5	60·4	58·8	57·9	58·4	58·2	58·3	58·5	59·3	56·5
28	59·0	57·5	55·6	54·9	53·7	51·9	50·2	50·1	51·9	56·8	58·0	62·4	66·1	67·1	64·6	63·5	61·0	57·6	56·8	58·1	58·6	57·8	57·9	58·2	57·9
29 q	58·9	58·4	57·7	54·9	52·9	51·7	51·2	49·5	48·5	50·4	53·9	60·2	62·8	64·5	64·5	62·0	60·0	57·5	56·7	57·0	57·4	57·5	58·7	60·1	57·0
30	57·3	54·6	54·7	55·9	55·1	55·6	56·5	57·5	55·1	56·9	59·4	62·8	64·5	64·7	63·9	62·6	60·5	58·4	56·5	57·4	59·3	60·1	60·3	62·0	58·8
Mean	56·6	56·1	55·1	54·8	52·7	51·4	50·6	*50·0*	51·1	53·9	57·6	61·5	64·6	*65·8*	65·7	64·3	62·3	60·9	59·1	58·6	58·8	58·4	57·9	56·7	57·7

TERRESTRIAL MAGNETIC FORCE: VERTICAL COMPONENT

Mean values for periods of sixty minutes ending at exact hours, G.M.T.

135 ESKDALEMUIR (V) — 44,000γ (0·44 C.G.S. unit) + — JUNE

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1 d	1075	1064	1033	1028	1039	1047	1076	1099	1103	1109	1105	1109	1120	1137	1152	1164	1171	1174	1172	1160	1154	1148	1148	1149	1114
2 q	1150	1150	1152	1156	1158	1161	1159	1155	1149	1142	1131	1125	1125	1130	1137	1147	1156	1161	1163	1158	1152	1149	1143	1142	1148
3	1142	1138	1132	1124	1107	1118	1131	1138	1137	1128	1126	1125	1124	1130	1138	1147	1155	1155	1154	1151	1151	1148	1144	1143	1137
4	1143	1144	1147	1149	1149	1148	1148	1147	1140	1132	1130	1128	1131	1135	1137	1142	1148	1159	1166	1158	1150	1145	1143	1142	1144
5 d	1142	1142	1144	1147	1148	1143	1139	1136	1131	1119	1114	1118	1135	1144	1153	1154	1152	1151	1154	1161	1164	1159	1155	1146	1144
6	1091	1125	1149	1159	1159	1159	1155	1148	1142	1140	1134	1131	1136	1137	1138	1143	1148	1154	1153	1153	1153	1155	1151	1146	1144
7	1140	1138	1131	1125	1117	1124	1130	1131	1130	1129	1116	1118	1130	1142	1146	1153	1170	1184	1179	1168	1164	1147	1114	1110	1139
8	1095	1066	1070	1071	1074	1096	1118	1124	1130	1137	1136	1136	1145	1159	1167	1181	1184	1186	1188	1184	1167	1155	1153	1147	1136
9	1137	1136	1123	1102	1118	1128	1131	1132	1137	1136	1136	1140	1148	1155	1161	1159	1158	1167	1173	1167	1159	1159	1155	1138	1144
10	1134	1131	1119	1125	1126	1117	1129	1136	1137	1129	1132	1127	1135	1146	1152	1154	1154	1154	1154	1155	1159	1158	1148	1147	1140
11	1140	1131	1137	1141	1143	1141	1131	1130	1131	1130	1126	1124	1130	1137	1143	1143	1146	1148	1149	1153	1152	1147	1143	1142	1139
12 q	1141	1139	1138	1141	1146	1149	1142	1136	1136	1131	1130	1130	1129	1130	1137	1144	1148	1147	1146	1153	1154	1152	1148	1140	1141
13	1134	1131	1129	1128	1133	1141	1143	1137	1130	1127	1116	1108	1113	1126	1137	1149	1156	1159	1156	1160	1149	1139	1129	1094	1134
14 d	1017	1005	1023	944	997	1076	1089	1087	1093	1108	1107	1117	1141	1154	1164	1166	1170	1179	1191	1176	1164	1159	1153	1147	*1109*
15	1140	1140	1141	1130	1134	1142	1144	1143	1137	1130	1130	1125	1131	1141	1148	1156	1160	1153	1155	1153	1152	1148	1144	1145	1143
16 q	1144	1144	1146	1148	1148	1143	1142	1140	1136	1135	1128	1122	1118	1125	1132	1137	1144	1148	1147	1147	1143	1142	1141	1140	1139
17 d	1142	1142	1141	1124	1101	1087	1094	1105	1111	1117	1117	1121	1129	1137	1149	1172	1193	1218	1249	1208	1190	1172	1160	1153	1147
18	1153	1150	1149	1148	1147	1142	1136	1130	1123	1119	1123	1124	1131	1137	1149	1159	1166	1166	1164	1161	1163	1160	1152	1137	1145
19	1130	1131	1136	1136	1123	1114	1128	1137	1142	1140	1134	1134	1137	1142	1142	1148	1167	1178	1177	1165	1159	1154	1148	1136	1143
20	1136	1141	1143	1143	1143	1143	1143	1147	1149	1156	1150	1131	1130	1138	1149	1153	1161	1167	1174	1171	1160	1153	1148	1146	1149
21	1146	1144	1146	1148	1151	1156	1156	1154	1148	1136	1142	1140	1146	1129	1137	1146	1154	1162	1166	1157	1153	1149	1143	1136	1148
22	1136	1135	1135	1131	1138	1145	1146	1146	1142	1136	1128	1122	1126	1132	1142	1149	1159	1173	1181	1180	1166	1153	1148	1138	1145
23	1132	1124	1126	1135	1142	1141	1137	1135	1135	1129	1123	1125	1137	1143	1150	1170	1186	1185	1171	1160	1154	1149	1146	1143	1145
24	1142	1144	1147	1144	1148	1150	1143	1138	1138	1131	1125	1125	1133	1147	1156	1165	1165	1166	1167	1174	1172	1166	1155	1147	1149
25 d	1142	1143	1134	1111	1097	1117	1105	1106	1119	1130	1137	1136	1143	1165	1166	1173	1183	1180	1173	1177	1170	1165	1160	1156	1145
26	1150	1149	1153	1151	1144	1131	1118	1114	1118	1125	1130	1143	1146	1159	1172	1184	1197	1195	1189	1173	1161	1153	1149	1150	*1152*
27 q	1141	1137	1138	1149	1153	1153	1152	1152	1149	1148	1141	1139	1142	1145	1149	1157	1163	1164	1165	1159	1155	1149	1146	1144	1150
28	1143	1143	1146	1147	1148	1146	1143	1140	1136	1135	1136	1137	1135	1131	1133	1140	1149	1156	1159	1154	1149	1147	1143	1142	1143
29 q	1142	1142	1143	1148	1149	1153	1149	1147	1148	1135	1130	1130	1127	1128	1134	1137	1141	1147	1144	1143	1143	1143	1141	1138	1141
30	1131	1125	1133	1137	1136	1137	1141	1136	1135	1136	1127	1125	1131	1142	1146	1149	1159	1167	1171	1167	1158	1149	1146	1140	1143
Mean	1131	1129	1129	*1126*	1127	1132	1133	1133	1133	1131	1128	1127	1133	1140	1147	1155	1162	1167	*1168*	1163	1158	1152	1147	1141	1141

DAILY EXTREMES OF TERRESTRIAL MAGNETIC ELEMENTS, MAGNETIC CHARACTER FIGURES AND TEMPERATURE IN MAGNET HOUSE

136 ESKDALEMUIR — JUNE

	TERRESTRIAL MAGNETIC ELEMENTS												3-hr. range indices K	Sum of K indices	Magnetic character of day (0-2)	Temperature in magnet house 200 +
	Horizontal force					Declination			Vertical force							
	Maximum 16,000γ +		Minimum 16,000γ +		Range	Maximum 11° +		Minimum 11° +		Range	Maximum 44,000γ +		Minimum 44,000γ +		Range				
	h. m.	γ	γ	h. m.	γ	h. m.	′	′	h. m.	′	h. m.	γ	γ	h. m.	γ				°A.
1 d	0 16	611	442	10 10	169	0 19	72·4	38·4	8 0	34·0	17 52	1177	1017	3 12	160	5,5,4,2,3,2,2,1	24	1	84·3
2 q	22 30	565	470	11 17	95	14 41	67·4	47·1	6 50	20·3	18 30	1164	1123	12 30	41	0,2,1,2,2,2,1,1	11	0	84·5
3	20 28	575	502	10 10	*73*	13 32	71·3	45·0	6 52	26·3	17 8	1157	1100	4 29	57	1,3,2,3,2,2,2,1	16	1	84·5
4	16 50	605	508	11 8	97	12 2	66·6	49·7	6 44	16·9	18 35	1168	1127	11 30	41	1,1,2,2,2,3,2,1	14	1	84·5
5 d	18 8	672	442	8 10	230	10 50	70·1	40·7	7 26	29·4	20 52	1167	1108	24 0	59	1,2,5,4,3,4,4,4	27	1	84·5
6	18 48	564	456	0 40	108	12 53	65·3	32·9	0 12	32·4	5 32	1164	1081	0 32	83	5,1,1,2,1,1,2,2	15	1	84·6
7	21 47	592	472	9 10	120	12 45	69·4	44·0	23 5	25·4	17 42	1189	1105	23 31	84	1,3,2,3,3,3,3,4	22	1	84·6
8	17 39	611	461	10 37	150	14 35	67·7	42·4	3 0	25·3	17 53	1194	1048	1 32	146	4,4,3,2,3,4,3,3	26	1	84·6
9	17 10	604	457	10 58	147	14 12	65·8	45·9	8 3	19·9	18 2	1178	1098	3 30	80	3,3,3,3,3,4,2,3	24	1	84·8
10	20 49	588	470	10 20	118	13 49	66·5	45·9	6 53	20·6	20 40	1161	1114	5 17	47	3,3,2,2,3,2,2,2	19	1	84·8
11	18 22	592	489	11 25	103	14 9	66·3	46·6	6 58	19·7	19 48	1154	1120	11 48	34	2,1,2,2,3,2,3,1	16	0	84·8
12 q	18 18	596	513	12 0	83	13 55	65·6	48·6	5 32	17·0	20 12	1158	1126	12 51	32	2,2,3,2,2,2,3,3	19	0	84·8
13	17 52	673	486	11 58	187	14 51	67·5	41·0	23 44	26·5	19 7	1164	1075	24 0	89	2,1,2,2,3,5,4,5	24	2	84·8
14 d	20 49	674	*319*	3 46	*355*	3 48	74·5	*31·5*	7 12	*43·0*	18 12	1195	*887*	3 50	*308*	5,6,4,4,4,5,5,3	36	2	84·8
15	18 11	576	458	11 3	118	14 3	67·0	42·1	5 37	24·9	16 0	1161	1124	11 32	37	3,3,2,3,2,3,2,2	20	1	84·8
16 q	23 5	584	491	11 6	93	12 48	69·0	47·7	7 43	21·3	4 25	1150	1117	12 17	33	2,1,1,2,2,2,2,2	14	0	84·8
17 d	17 58	*708*	475	11 28	233	17 56	*78·1*	47·3	7 39	30·8	18 36	*1263*	1080	6 52	183	2,4,3,3,4,6,5,3	30	2	84·8
18	18 48	597	484	11 39	113	12 45	70·9	48·7	22 27	22·2	16 59	1171	1118	8 59	53	2,3,2,3,2,2,3,3	20	1	84·9
19	15 54	601	483	10 11	118	14 3	70·1	46·1	6 3	24·0	17 54	1183	1108	5 4	75	2,3,3,3,3,4,2,2	22	1	85·0
20	18 48	601	485	10 48	116	14 40	67·3	49·7	8 4	17·6	18 20	1176	1126	12 9	50	2,1,2,2,2,3,2,1	15	1	85·0
21	17 24	593	470	10 15	123	12 53	68·4	46·0	9 0	22·4	17 50	1167	1106	10 59	61	1,1,3,3,2,3,2,3	18	1	85·0
22	17 41	651	493	9 53	158	13 40	68·7	45·9	6 21	22·8	18 15	1183	1120	11 38	63	2,3,2,2,3,4,3,3	22	1	85·0
23	14 56	632	497	9 44	135	14 53	69·4	51·9	6 30	17·5	17 3	1191	1118	1 45	73	3,2,3,3,4,4,2,2	23	1	85·0
24	17 42	608	501	10 38	107	15 42	63·7	51·1	7 57	*12·6*	19 54	1177	1123	10 45	54	2,3,1,2,2,4,3,2	19	1	85·1
25 d	18 43	595	473	10 46	122	6 8	65·5	50·2	4 39	15·3	16 40	1185	1091	4 0	94	3,4,4,3,4,3,2,3	26	1	85·1
26	19 15	591	487	11 42	104	13 40	66·5	51·9	8 8	14·6	16 28	1201	1112	6 55	89	2,3,3,3,3,4,3,3	24	1	85·1
27 q	19 28	602	506	12 54	96	14 11	64·9	47·8	6 32	17·1	18 30	1166	1135	2 5	31	3,1,1,1,2,2,2,1	13	0	85·2
28	18 1	600	488	12 0	112	13 15	68·2	49·3	7 28	18·9	18 25	1161	1130	13 43	31	1,3,2,3,3,3,3,2	20	1	85·2
29 q	19 10	582	504	10 40	78	14 5	64·7	47·8	8 15	16·9	5 43	1154	1125	12 59	*29*	1,2,2,1,1,2,2,2	13	0	85·2
30	19 15	585	501	6 54	84	12 59	65·5	52·8	0 51	12·7	18 15	1173	1123	1 13	50	3,2,3,2,2,3,3,2	20	1	85·3
Mean	- -	608	476	- -	132	- -	68·1	45·9	- -	22·3	- -	1175	1099		76	-	-	0·90	84·8

q denotes an international quiet day and d an international disturbed day.

TERRESTRIAL MAGNETIC FORCE: HORIZONTAL COMPONENT

Mean values for periods of sixty minutes ending at exact hours, G.M.T.

137 ESKDALEMUIR (H) — 16,000γ (0·16 C.G.S. unit) + — JULY

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1	557	552	549	552	562	554	549	540	530	519	502	501	504	510	528	552	578	601	584	561	569	579	570	560	548
2	535	536	556	556	546	553	542	526	513	505	500	501	514	533	543	592	600	554	569	568	573	580	561	553	546
3 q	541	546	544	547	550	539	520	509	505	505	500	503	513	525	536	554	541	569	568	567	567	561	558	553	538
4 q	548	546	545	549	552	549	536	525	517	506	500	494	509	525	544	557	557	558	560	561	562	560	560	557	541
5 q	561	555	550	556	556	552	540	529	520	513	510	513	523	536	547	565	572	569	576	576	576	562	556	554	549
6	556	554	557	553	556	553	545	527	509	501	498	489	511	517	541	540	585	573	584	573	573	560	561	566	545
7	557	549	544	548	552	545	534	526	521	509	508	508	513	532	548	550	553	580	602	601	581	573	565	544	548
8	546	547	550	550	550	555	556	545	533	517	508	504	513	525	541	561	568	585	605	577	573	565	561	564	550
9	545	545	544	550	554	553	545	534	517	500	497	494	502	519	536	556	569	571	589	584	588	557	556	561	544
10	556	548	537	546	548	544	538	525	510	504	497	504	512	529	544	576	577	564	569	577	584	563	549	565	544
11	560	548	544	545	548	536	540	537	530	520	510	504	509	517	531	569	570	577	588	596	573	580	548	545	547
12	537	540	549	553	534	543	541	529	516	505	490	493	525	542	546	545	554	575	588	557	563	556	550	548	541
13	546	540	534	536	544	538	533	517	500	486	481	481	501	540	536	576	580	596	584	565	568	556	557	545	539
14 q	552	552	546	545	545	537	518	508	506	510	509	510	518	537	541	557	587	580	584	591	574	556	553	549	544
15	553	554	547	533	541	533	531	521	516	497	489	488	510	521	537	553	586	567	582	569	560	553	549	554	539
16	556	563	543	545	545	549	534	519	513	508	502	503	514	524	536	552	561	564	557	556	558	563	564	567	541
17 d	570	566	564	564	563	556	550	537	525	510	510	519	521	529	544	568	599	624	804	788	803	601	426	453	*575*
18 d	474	521	547	548	577	556	531	527	513	494	496	477	494	585	616	562	596	655	665	589	518	514	529	530	546
19 d	493	458	474	508	519	521	497	510	500	461	442	481	485	486	504	529	562	591	580	558	573	544	538	538	*515*
20 d	548	540	530	521	517	531	513	481	514	497	481	437	481	485	513	569	521	536	567	561	564	542	537	522	521
21	526	533	531	529	537	549	517	502	493	485	477	487	487	502	535	549	557	575	584	580	571	556	549	542	531
22	544	538	529	542	550	541	537	528	501	489	496	498	497	533	530	520	555	569	580	592	582	557	552	544	538
23 d	541	544	537	542	532	555	536	521	507	473	478	489	509	532	505	542	529	563	565	573	584	566	545	542	534
24	549	543	540	534	529	548	547	529	516	500	488	485	505	498	544	573	580	557	557	564	573	561	561	560	539
25	553	549	541	536	543	542	535	510	504	497	504	506	493	533	505	546	548	579	564	585	572	560	563	557	539
26	544	532	539	525	540	552	529	525	533	524	506	508	498	496	548	529	572	556	559	572	565	557	561	540	538
27	545	549	545	548	545	538	525	534	527	520	505	489	501	524	531	549	541	552	576	555	560	549	549	551	539
28	554	545	546	545	545	544	537	529	515	498	490	489	502	534	547	563	566	572	577	557	553	553	549	544	540
29	545	537	541	529	534	517	519	520	498	477	473	474	493	525	541	544	554	550	561	556	541	539	537	537	527
30 q	539	541	545	547	555	549	540	527	513	507	510	513	513	525	540	553	559	555	564	562	561	564	556	549	541
31	554	549	541	541	542	541	544	537	525	509	501	505	509	504	530	562	577	576	565	565	581	570	565	542	543
Mean	545	543	542	543	545	544	534	524	514	501	495	*495*	506	523	538	555	566	574	*586*	579	576	560	549	546	541

MAGNETIC DECLINATION (WEST)

Mean values for periods of sixty minutes ending at exact hours, G.M.T.

138 ESKDALEMUIR (D) — 11° + — JULY

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′
1	58·9	59·4	56·0	53·8	53·1	51·7	51·0	49·3	50·3	53·4	55·7	60·9	65·0	66·5	66·4	64·5	62·6	60·5	56·2	57·2	58·0	59·2	58·8	56·4	57·7
2	54·0	55·0	54·5	55·7	55·8	47·8	47·5	51·1	52·5	52·4	56·2	61·9	64·6	66·3	65·7	64·6	60·3	57·8	55·8	58·4	59·7	60·3	57·4	57·3	57·2
3 q	56·5	55·6	54·5	53·1	51·6	48·4	50·1	53·0	52·0	55·3	57·9	60·1	63·3	63·7	62·8	60·5	59·1	59·0	58·2	57·5	57·5	56·5	58·3	57·9	56·8
4 q	57·3	56·9	55·1	54·3	53·0	50·3	48·0	48·2	49·9	52·0	55·5	61·1	65·4	67·4	67·0	64·3	62·4	60·1	58·1	57·4	57·4	57·2	57·4	57·6	57·2
5 q	56·7	56·4	55·4	54·9	53·1	50·2	47·6	47·5	47·5	50·5	54·4	60·1	63·7	65·3	65·3	65·1	63·7	61·0	60·7	59·2	58·8	58·4	56·4	56·2	57·0
6	56·5	57·3	54·7	52·6	52·5	51·9	49·7	49·3	51·1	53·2	55·6	59·9	64·3	67·3	66·8	65·5	65·5	62·8	61·9	60·1	59·2	57·8	57·4	55·9	57·9
7	51·1	52·0	52·0	52·8	50·2	47·4	47·9	47·5	48·4	50·9	54·2	59·2	64·1	67·3	68·2	66·7	63·5	62·9	61·9	59·7	57·9	58·0	58·8	55·1	56·6
8	54·7	52·9	53·8	53·0	52·1	49·2	49·9	50·0	52·9	52·1	53·5	58·1	63·4	66·6	66·6	65·6	62·7	61·9	57·4	57·3	58·6	58·7	56·6	53·8	56·7
9	52·9	53·1	52·0	52·1	50·3	46·8	45·8	48·0	46·6	50·2	55·3	59·1	62·8	64·6	66·1	65·2	63·2	61·0	61·1	59·6	57·5	56·2	57·5	57·3	56·0
10	50·8	54·8	52·0	53·8	49·8	48·6	49·2	49·7	51·0	52·5	54·7	59·3	62·1	63·0	63·7	64·5	62·5	60·7	60·5	60·3	59·3	57·0	54·7	57·2	56·3
11	54·0	51·1	52·3	52·4	52·3	49·5	50·2	48·3	49·2	50·5	54·7	59·2	61·0	61·5	63·4	64·8	63·2	59·9	57·4	58·3	58·2	58·1	55·7	54·8	55·8
12	53·3	54·7	54·6	57·0	55·7	51·8	49·3	50·4	50·2	51·6	55·8	53·0	63·7	66·5	66·3	63·2	61·0	59·3	57·9	57·5	57·6	57·5	57·8	57·4	56·8
13	54·1	50·0	50·7	51·1	50·8	49·5	48·2	47·6	48·8	52·9	56·2	59·2	63·0	67·0	65·5	64·6	61·8	58·4	56·6	57·2	58·3	57·3	55·5	56·4	55·9
14 q	57·0	56·7	54·8	53·7	52·1	50·4	49·3	48·4	48·8	52·0	55·6	60·4	63·6	64·7	64·6	64·4	62·7	60·0	59·1	58·4	60·0	59·2	58·4	56·5	57·1
15	56·5	53·5	52·0	51·1	51·4	52·3	50·2	50·4	49·3	52·2	56·5	60·6	63·8	64·6	64·5	62·8	60·0	55·7	57·5	57·1	57·1	58·4	57·9	57·6	56·4
16	58·7	60·7	52·5	52·7	49·6	48·4	47·5	48·4	49·8	52·9	56·1	59·2	63·7	66·1	65·5	63·0	60·3	57·5	56·6	57·4	57·5	57·2	57·2	56·9	56·5
17 d	56·5	55·6	55·1	53·8	51·9	49·4	48·4	47·6	48·0	49·4	53·0	59·9	65·6	67·8	66·6	65·3	64·8	66·5	72·3	69·6	73·6	67·2	64·4	60·1	*59·7*
18 d	48·2	47·8	52·4	46·2	46·6	41·3	37·6	41·3	40·5	46·6	51·3	59·4	63·2	66·4	67·9	65·8	64·0	64·6	60·1	61·9	58·7	60·3	57·8	52·3	*54·3*
19 d	53·2	56·4	61·7	52·1	48·4	48·8	52·3	51·5	54·7	54·3	55·8	58·3	61·1	62·6	60·3	59·7	58·5	55·6	55·5	56·5	57·5	57·5	57·4	57·7	56·1
20 d	60·0	59·9	55·7	57·3	57·4	48·5	51·5	53·8	52·4	52·0	55·6	57·8	62·7	62·6	61·5	61·9	55·6	58·2	55·7	54·7	55·6	57·4	55·5	58·3	56·7
21	57·4	57·5	57·7	59·3	53·8	52·9	51·1	48·2	49·1	52·0	56·5	61·6	62·5	63·6	64·5	63·9	62·8	60·7	59·5	59·1	58·1	56·5	56·5	56·5	57·6
22	55·6	54·5	53·8	56·1	53·0	52·1	50·2	50·2	51·3	53·8	54·2	58·4	61·5	66·1	66·0	65·3	63·6	61·0	59·1	57·6	54·6	54·9	58·4	57·6	57·0
23 d	54·5	56·4	56·4	59·2	53·6	53·9	51·2	52·0	51·9	51·4	52·9	58·4	62·2	64·4	63·5	63·5	62·1	60·1	57·5	57·4	57·1	54·8	53·0	56·5	56·8
24	56·9	57·4	55·0	56·4	56·5	50·3	50·2	48·4	48·9	51·7	54·9	57·7	60·5	62·0	62·0	62·0	59·7	58·3	57·5	57·6	57·9	57·6	57·9	57·0	56·4
25	53·6	56·6	51·8	50·2	51·4	50·7	50·0	49·3	50·7	63·8	56·5	60·5	64·5	65·1	62·3	61·9	60·5	59·6	58·1	57·9	56·8	56·0	56·8	56·9	56·3
26	54·3	54·5	56·5	65·4	56·6	52·1	53·7	54·7	54·5	54·7	54·8	60·1	62·8	64·1	66·3	62·8	60·0	56·5	55·4	56·1	56·5	55·7	56·8	56·5	57·6
27	57·0	56·6	56·6	60·1	61·8	62·0	64·1	59·3	52·9	52·5	55·7	59·7	62·4	63·9	64·7	62·8	61·1	59·0	57·4	56·1	55·5	56·2	56·5	57·2	58·8
28	54·7	54·7	56·4	55·1	53·7	51·8	50·9	49·3	49·9	48·9	51·0	54·8	58·2	60·3	61·9	62·6	60·2	58·1	55·8	56·9	57·5	56·1	55·5	56·5	55·5
29	56·4	54·7	54·8	57·8	56·5	54·3	53·0	51·2	50·0	51·1	55·6	60·5	63·5	64·5	65·3	63·5	60·3	59·2	56·2	56·6	56·7	56·6	55·8	55·2	57·1
30 q	54·8	55·2	55·6	55·4	54·9	54·2	52·1	50·9	52·1	53·8	56·3	59·3	63·3	65·0	64·6	62·7	61·1	59·3	59·0	58·2	58·0	58·3	58·2	56·5	57·5
31	56·6	56·5	54·3	52·1	50·4	49·4	48·6	48·5	49·8	52·0	54·5	58·9	65·0	67·2	68·7	66·4	63·5	60·5	57·2	56·5	58·4	57·5	54·7	52·9	56·7
Mean	55·3	55·3	54·5	54·5	52·9	50·5	49·9	*49·8*	50·2	52·0	55·1	59·3	63·1	65·0	*65·0*	63·9	61·7	59·9	58·5	58·2	58·2	57·7	57·1	56·5	56·8

TERRESTRIAL MAGNETIC FORCE: VERTICAL COMPONENT

Mean values for periods of sixty minutes ending at exact hours, G.M.T.

139 ESKDALEMUIR (V) — 44,000γ (0·44 C.G.S. unit) + — JULY

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1	1136	1138	1140	1141	1138	1138	1141	1142	1137	1132	1129	1123	1127	1136	1143	1147	1147	1158	1167	1162	1151	1144	1143	1143	1142
2	1135	1130	1129	1135	1129	1131	1141	1141	1135	1129	1114	1118	1123	1132	1137	1140	1162	1177	1174	1160	1152	1146	1147	1147	1140
3 q	1147	1146	1147	1147	1148	1149	1146	1137	1135	1134	1136	1132	1131	1136	1141	1141	1148	1148	1154	1154	1151	1148	1144	1143	1143
4 q	1144	1144	1145	1146	1147	1149	1148	1143	1137	1125	1120	1116	1116	1117	1118	1129	1137	1143	1144	1144	1142	1141	1138	1137	1136
5 q	1137	1137	1138	1138	1140	1141	1140	1137	1131	1121	1111	1108	1108	1119	1126	1126	1131	1139	1144	1144	1141	1140	1137	1137	1132
6	1136	1134	1129	1134	1137	1140	1141	1142	1137	1128	1124	1118	1113	1123	1128	1134	1142	1153	1148	1147	1142	1140	1137	1131	1135
7	1128	1129	1130	1132	1126	1130	1126	1124	1123	1113	1112	1109	1109	1112	1118	1125	1137	1139	1142	1142	1147	1143	1136	1135	1128
8	1132	1132	1135	1136	1135	1131	1124	1123	1119	1116	1119	1126	1130	1131	1136	1141	1141	1142	1153	1155	1148	1141	1137	1130	1134
9	1130	1130	1135	1135	1134	1134	1131	1132	1125	1123	1112	1101	1105	1106	1117	1119	1127	1131	1136	1141	1143	1143	1138	1131	*1127*
10	1118	1117	1113	1104	1113	1125	1130	1130	1127	1113	1113	1124	1128	1128	1129	1135	1153	1159	1153	1148	1147	1146	1143	1130	1130
11	1118	1120	1126	1130	1130	1132	1130	1131	1126	1116	1114	1110	1111	1113	1122	1126	1137	1149	1148	1144	1144	1141	1130	1124	1128
12	1126	1125	1122	1111	1110	1121	1129	1134	1135	1129	1125	1122	1123	1123	1124	1131	1137	1146	1154	1156	1148	1141	1137	1135	1131
13	1136	1131	1128	1134	1138	1140	1138	1138	1136	1124	1116	1114	1113	1119	1134	1138	1159	1170	1167	1154	1143	1141	1138	1137	1137
14 q	1136	1131	1130	1135	1139	1143	1138	1137	1135	1118	1115	1112	1108	1115	1126	1132	1139	1154	1158	1158	1155	1148	1143	1141	1135
15	1128	1125	1121	1122	1124	1126	1131	1136	1130	1129	1129	1126	1120	1131	1138	1144	1151	1153	1156	1153	1153	1149	1146	1141	1136
16	1137	1132	1137	1144	1144	1149	1153	1150	1143	1146	1134	1125	1130	1137	1144	1150	1159	1160	1159	1156	1154	1153	1154	1154	1146
17 d	1154	1155	1155	1156	1159	1160	1158	1159	1155	1149	1147	1135	1129	1130	1141	1151	1165	1167	1160	1221	1302	1250	1146	1168	1165
18 d	1107	1106	1165	1161	1178	1187	1183	1170	1158	1147	1143	1144	1154	1179	1250	1290	1316	1296	1281	1221	1214	1194	1166	1147	*1190*
19 d	1130	1089	1076	1077	1126	1158	1152	1154	1165	1178	1184	1189	1179	1185	1184	1191	1201	1219	1220	1209	1176	1184	1172	1168	1165
20 d	1166	1149	1154	1143	1137	1157	1159	1154	1150	1157	1159	1165	1171	1191	1208	1220	1248	1231	1219	1211	1198	1184	1170	1165	1178
21	1166	1166	1164	1161	1158	1158	1159	1155	1154	1153	1150	1152	1151	1146	1150	1160	1166	1165	1171	1177	1176	1172	1166	1164	1161
22 d	1164	1165	1166	1160	1162	1167	1166	1164	1160	1146	1141	1134	1137	1142	1155	1156	1171	1183	1186	1189	1189	1183	1167	1161	1163
23	1149	1154	1154	1149	1143	1149	1156	1159	1153	1147	1148	1152	1148	1159	1162	1167	1177	1177	1178	1173	1172	1167	1162	1160	1159
24	1154	1153	1155	1160	1153	1156	1160	1161	1160	1161	1158	1154	1149	1155	1160	1166	1177	1183	1177	1172	1167	1166	1161	1159	1162
25	1150	1147	1130	1130	1146	1153	1156	1155	1152	1146	1145	1135	1130	1143	1154	1168	1172	1184	1191	1189	1184	1176	1160	1156	1156
26	1155	1154	1143	1126	1105	1124	1142	1144	1147	1142	1143	1138	1141	1152	1164	1178	1185	1201	1196	1187	1182	1172	1162	1164	1156
27	1160	1155	1153	1152	1145	1137	1129	1120	1135	1139	1143	1143	1144	1153	1171	1172	1184	1183	1180	1178	1177	1168	1165	1162	1156
28	1153	1154	1155	1158	1160	1162	1161	1159	1159	1150	1146	1138	1141	1149	1150	1168	1171	1173	1179	1177	1168	1160	1159	1156	1159
29	1153	1149	1145	1142	1147	1150	1148	1147	1147	1142	1144	1139	1137	1141	1147	1164	1177	1176	1172	1170	1163	1160	1160	1160	1153
30 q	1159	1159	1158	1159	1159	1160	1161	1161	1156	1148	1145	1142	1143	1146	1149	1154	1160	1162	1161	1160	1159	1158	1160	1158	1156
31	1153	1149	1152	1153	1155	1157	1153	1153	1147	1143	1132	1126	1124	1129	1136	1150	1159	1170	1179	1173	1161	1160	1160	1157	1151
Mean	1142	1139	1140	1139	1141	1146	1146	1145	1142	1137	1134	*1131*	1131	1138	1147	1156	1166	1171	*1171*	1169	1166	1160	1151	1148	1148

DAILY EXTREMES OF TERRESTRIAL MAGNETIC ELEMENTS, MAGNETIC CHARACTER FIGURES AND TEMPERATURE IN MAGNET HOUSE

140 ESKDALEMUIR — JULY

	TERRESTRIAL MAGNETIC ELEMENTS												3-hr. range indices K	Sum of K indices	Magnetic character of day (0-2)	Temperature in magnet house 200 +
	Horizontal force					Declination			Vertical force							
	Maximum 16,000γ +		Minimum 16,000γ +		Range	Maximum 11° +	Minimum 11° +	Range	Maximum 44,000γ +		Minimum 44,000γ +		Range				
	h. m.	γ	γ	h. m.	γ	h. m.	′	′	h. m.	′	h. m.	γ	γ	h. m.	γ				°A.
1	17 11	628	491	10 41	137	13 59	67·3	48·5	7 22	18·8	18 49	1171	1120	11 54	51	3,2,2,2,2,4,3,2	20	1	85·4
2	16 5	603	493	10 51	110	13 12	66·8	46·6	6 12	20·2	17 57	1179	1113	10 47	66	3,3,3,2,3,4,3,3	24	1	85·3
3 q	17 45	581	494	11 2	87	13 32	64·2	46·9	5 26	17·3	18 30	1155	1130	12 12	25	1,2,3,1,2,3,2,2	16	0	85·7
4 q	20 42	564	493	11 10	*71*	13 55	67·9	46·9	6 1	21·0	6 0	1150	1114	11 57	36	1,1,1,2,2,2,0,1	10	0	85·2
5 q	18 34	580	506	10 10	74	13 56	65·5	46·5	6 52	19·0	18 55	1149	1107	11 50	42	1,1,1,2,1,2,1,2	11	0	85·2
6	18 26	596	485	11 15	111	13 47	68·3	48·4	7 0	19·9	17 39	1155	1111	12 32	44	2,1,2,2,3,3,3,2	18	1	85·2
7	18 59	611	504	12 48	107	14 56	69·0	45·6	5 6	23·4	20 50	1149	1107	11 8	42	2,3,0,2,3,3,3,3	19	1	85·1
8	18 19	623	490	11 43	133	14 1	69·0	47·6	6 0	21·4	18 50	1160	1114	9 55	46	2,1,2,2,3,3,3,2	18	1	85·1
9	19 2	600	489	11 30	111	14 53	66·4	44·8	6 41	21·6	20 49	1148	1100	11 42	48	2,2,2,2,2,2,2,3	17	0	85·1
10	16 0	599	493	10 7	106	15 39	65·6	47·6	6 9	18·0	17 40	1160	1099	3 38	61	4,2,2,2,2,3,3,3	21	1	85·1
11	19 4	608	492	11 49	116	15 11	67·4	46·5	7 58	20·9	17 53	1154	1107	12 5	47	2,2,2,3,3,3,3,3	21	1	85·1
12	18 19	593	485	10 49	108	14 23	67·5	46·5	6 12	21·0	19 14	1159	1106	4 0	53	2,3,2,2,3,3,3,2	20	1	85·1
13	17 24	607	468	11 10	139	13 52	68·0	45·9	6 7	22·1	17 44	1174	1112	11 40	62	3,2,2,2,3,3,3,2	20	1	85·1
14 q	19 9	604	505	8 30	99	13 45	65·6	47·5	7 28	18·1	19 58	1159	1107	12 42	52	1,1,1,1,2,3,3,2	14	0	85·2
15	16 58	607	482	11 25	125	13 20	64·8	47·9	8 0	16·9	18 30	1158	1116	12 19	42	2,3,1,2,2,3,1,1	15	0	85·4
16	24 0	571	497	10 50	74	1 18	66·7	47·1	6 58	19·6	16 43	1161	1123	11 31	38	4,1,3,1,1,2,1,2	15	0	85·4
17 d	18 17	*1049*	*241*	22 38	*808*	22 47	*87·1*	47·4	7 44	39·7	20 49	*1395*	*1011*	22 39	*384*	0,1,1,2,2,7,8,7	28	2	85·4
18 d	18 34	698	406	11 11	292	15 47	73·1	*29·5*	6 39	*43·6*	16 21	1333	1070	1 5	263	5,4,5,5,6,6,6,4	41	2	85·4
19 d	17 29	611	418	10 34	193	2 23	65·5	45·4	5 6	20·2	17 59	1226	1061	3 10	165	4,4,3,4,3,4,4,2	28	1	85·4
20 d	15 40	617	430	11 23	187	1 0	65·6	46·6	5 42	19·0	16 30	1251	1131	4 29	120	3,4,3,4,4,5,3,3	29	1	85·4
21	18 55	607	471	10 32	136	14 59	64·9	46·6	7 38	18·3	20 16	1178	1123	8 1	55	2,3,3,2,3,2,3,2	20	1	85·4
22	18 59	608	478	10 3	130	13 50	68·0	49·2	7 42	18·8	20 48	1192	1129	11 50	63	2,2,2,3,3,4,3,3	22	1	85·7
23 d	20 48	601	459	9 58	142	13 52	65·6	47·6	6 37	18·0	18 1	1182	1141	4 9	41	3,3,4,3,4,3,3,3	26	1	85·8
24	16 15	607	474	10 41	133	13 51	62·9	46·6	5 59	16·3	17 23	1185	1148	12 20	37	2,3,2,2,3,3,3,2	20	1	85·8
25	19 12	605	471	14 24	134	13 31	66·0	47·5	7 22	18·5	18 0	1195	1124	3 11	71	3,2,2,3,4,4,3,2	23	1	85·8
26	17 10	592	457	12 10	135	3 44	68·7	51·0	5 43	17·7	17 30	1203	1100	4 24	103	3,4,3,3,4,3,3,2	25	1	85·8
27	18 20	593	476	11 19	117	6 32	66·6	50·1	9 10	16·5	16 19	1185	1118	7 21	67	2,3,4,3,4,3,3,2	24	1	85·8
28	18 12	585	474	10 57	111	15 11	63·2	47·4	7 44	*15·8*	18 40	1180	1137	11 54	43	2,1,2,2,3,2,3,2	17	0	85·8
29	14 59	579	458	11 9	121	14 53	66·4	49·3	8 26	17·1	16 43	1178	1136	11 59	42	2,2,2,3,4,3,2,1	19	1	85·8
30 q	16 22	569	506	9 40	63	14 2	66·6	50·1	7 49	16·5	19 40	1162	1141	11 12	*21*	1,2,2,1,1,2,1,2	12	0	85·9
31	16 40	590	489	13 16	101	13 45	69·9	47·9	7 12	22·0	18 48	1180	1122	12 8	58	2,1,1,2,3,3,3,3	18	1	85·9
Mean	- -	616	470	- -	146	- -	67·2	46·9	- -	20·5	- -	1186	1112	- -	74	-	-	0·77	85·4

q denotes an international quiet day and d an international disturbed day.

TERRESTRIAL MAGNETIC FORCE: HORIZONTAL COMPONENT

Mean values for periods of sixty minutes ending at exact hours, G.M.T.

141 ESKDALEMUIR (H) — 16,000γ (0·16 C.G.S. unit) + — AUGUST

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1	537	557	541	530	542	531	509	521	505	482	485	489	509	524	547	573	550	561	571	581	580	552	550	544	536
2	541	541	543	541	544	544	536	527	514	500	490	490	508	515	544	545	555	577	545	549	569	569	542	538	536
3	539	539	542	543	541	533	530	521	506	482	481	475	477	494	518	525	534	550	569	574	560	556	554	549	529
4	548	546	546	542	540	533	525	518	502	501	482	493	496	509	525	543	542	540	543	549	556	557	554	546	531
5 q	548	545	538	546	548	544	536	529	520	510	505	501	509	511	523	533	553	559	554	554	557	557	557	558	537
6	556	549	551	547	546	541	534	533	525	504	494	478	509	529	530	549	546	560	560	572	569	561	549	555	*539*
7	559	545	552	542	538	546	533	525	505	488	481	488	497	514	529	542	548	561	552	569	556	554	549	556	535
8 q	554	564	537	540	544	541	533	527	516	497	485	489	490	518	531	541	540	546	549	552	555	556	557	554	534
9 q	553	549	549	557	552	549	545	537	521	497	482	478	492	505	525	544	554	565	565	565	561	565	547	542	537
10 q	557	553	550	549	552	542	537	525	489	486	474	478	490	497	515	521	537	549	560	569	569	569	554	546	532
11	545	541	541	550	550	546	536	525	506	493	493	481	494	535	549	558	561	572	574	569	561	559	554	542	*539*
12	552	573	557	522	517	485	470	478	466	454	467	472	482	477	513	513	535	540	536	544	561	559	542	530	514
13	540	541	544	542	545	529	509	499	493	485	482	487	498	494	533	566	611	552	583	576	562	552	546	513	533
14	517	522	554	535	537	536	538	528	516	504	497	501	508	515	522	544	560	571	549	552	551	545	552	548	533
15 d	540	539	538	540	541	537	530	521	505	503	495	533	549	565	585	598	602	557	580	564	600	512	327	372	531
16 d	102	477	478	491	491	477	459	468	458	441	422	482	496	497	533	546	533	533	521	529	530	512	515	524	*480*
17	503	509	525	522	517	526	510	478	454	466	456	438	449	469	496	505	532	590	596	554	528	529	509	514	508
18 d	506	434	481	525	498	481	510	486	455	404	431	461	435	474	506	531	537	517	588	550	531	515	517	522	496
19	526	523	512	513	518	533	529	506	487	466	446	485	460	455	525	589	506	530	554	550	546	534	510	521	513
20	513	461	496	530	533	510	481	505	490	466	475	458	493	489	525	553	564	509	537	539	544	533	534	509	510
21	517	513	532	513	536	505	513	510	510	481	439	451	487	492	512	521	560	553	552	549	538	537	534	541	517
22 d	540	539	542	537	549	533	545	518	488	236	327	418	427	438	415	441	500	490	521	536	524	509	503	513	483
23 d	514	477	454	432	462	469	477	477	468	456	455	436	457	514	632	540	520	584	554	525	517	518	519	537	500
24	540	517	513	508	517	521	498	485	478	470	472	477	509	501	516	515	529	537	540	567	534	517	533	527	513
25	525	541	517	514	525	513	513	509	461	440	455	475	498	537	509	533	514	540	557	552	549	545	549	535	517
26	553	526	528	533	532	536	535	531	501	490	490	472	477	494	506	512	521	525	541	544	546	544	544	561	523
27	552	532	536	529	533	541	528	494	501	500	505	501	512	517	521	518	529	538	542	541	542	541	539	537	526
28	535	533	539	538	537	541	541	533	525	506	504	513	521	533	549	545	533	563	557	560	567	553	552	522	537
29	556	528	540	536	533	527	520	505	493	474	481	497	510	529	531	564	538	537	549	554	557	553	549	544	529
30 q	541	540	541	545	540	530	521	514	508	493	483	491	502	513	525	537	542	536	540	544	550	549	550	552	529
31	549	544	542	538	537	544	536	526	508	508	505	509	521	525	533	533	563	583	571	560	558	546	537	537	538
Mean	525	529	531	530	532	527	520	512	496	474	*473*	481	492	506	527	538	543	549	*555*	555	553	544	533	532	523

MAGNETIC DECLINATION (WEST)

Mean values for periods of sixty minutes ending at exact hours, G.M.T.

142 ESKDALEMUIR (D) — 11° + — AUGUST

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′
1	56·8	53·7	47·6	46·8	48·9	42·3	41·6	47·2	52·0	53·6	57·7	60·6	65·8	69·5	69·1	69·0	62·9	60·5	59·2	58·0	53·8	56·5	56·5	56·2	56·1
2	55·5	53·9	52·2	51·5	52·9	51·8	48·4	51·3	52·0	52·1	56·5	62·5	66·7	68·5	69·1	64·4	61·0	60·0	56·0	56·7	58·2	53·1	53·6	55·5	56·8
3	55·6	56·2	54·9	54·0	52·3	49·5	48·5	47·5	49·2	52·0	55·5	59·3	65·4	68·3	68·1	65·5	60·7	58·3	56·6	54·0	56·6	57·7	57·3	56·0	56·6
4	54·5	56·3	54·6	53·0	52·8	52·1	50·2	49·5	48·9	50·2	55·4	61·0	65·7	68·3	68·0	64·6	61·0	57·5	56·2	56·6	57·4	57·1	56·4	55·6	56·8
5 q	54·3	54·6	55·5	55·7	52·7	50·3	49·4	50·1	50·9	52·5	55·7	60·9	65·5	67·4	67·4	66·4	64·7	61·0	59·2	58·9	58·1	58·2	56·9	55·7	57·6
6	56·3	54·9	54·8	53·8	53·0	51·1	48·4	47·4	48·3	51·1	56·5	62·5	66·8	67·8	66·4	63·6	60·7	59·2	57·4	58·2	56·4	53·7	55·2	56·7	56·7
7	57·2	54·8	55·6	54·9	54·9	50·0	46·4	46·4	47·5	49·7	51·7	56·5	62·8	67·3	67·4	65·5	63·4	61·1	58·3	58·9	58·3	57·5	57·4	57·4	56·7
8 q	57·6	52·7	51·0	53·3	52·4	49·7	51·1	50·8	50·4	52·2	55·4	60·8	65·4	68·9	67·8	64·8	61·9	59·4	58·3	58·2	58·2	57·6	57·5	57·2	57·2
9 q	56·3	55·2	53·7	54·5	52·3	50·4	50·0	49·5	48·5	49·7	52·0	57·5	63·5	65·5	65·5	64·5	61·8	60·1	58·4	58·8	58·6	59·2	57·1	56·9	56·6
10 q	56·5	55·9	54·7	53·9	53·1	52·8	52·0	48·5	47·6	51·2	54·8	59·0	64·6	67·1	67·1	64·5	61·6	59·2	57·5	57·8	57·5	57·4	56·9	54·8	56·9
11	54·8	53·0	52·2	52·5	51·1	48·4	47·2	47·2	48·4	52·5	57·4	61·9	65·5	70·0	69·9	65·4	62·7	60·0	58·3	57·5	58·1	57·5	53·8	55·1	56·7
12	54·8	49·9	45·6	52·7	52·9	52·0	51·5	51·3	50·9	51·9	55·6	58·5	63·4	64·6	66·5	61·8	60·0	60·0	59·4	59·4	58·4	58·4	58·4	53·3	56·3
13	51·1	53·8	53·3	52·9	52·6	49·4	50·1	50·8	54·7	55·7	56·9	60·9	65·9	66·7	66·3	63·7	67·3	60·2	57·4	59·0	56·6	61·3	60·6	51·7	57·5
14	51·1	51·8	57·5	53·0	53·0	51·0	51·8	52·0	51·1	53·8	55·3	58·9	61·1	63·4	62·9	59·9	58·5	58·5	56·6	58·2	59·2	57·4	59·3	55·5	56·3
15 d	55·2	55·3	55·4	55·3	53·8	52·1	50·1	49·9	51·8	53·6	52·4	65·8	72·9	72·3	72·9	73·4	70·2	67·3	65·5	62·8	62·3	60·8	50·9	43·2	*59·4*
16 d	50·7	44·8	49·3	47·4	45·9	45·4	44·1	46·5	48·4	51·3	52·8	59·2	61·8	61·1	61·4	60·9	59·8	57·1	56·6	54·7	51·0	53·9	57·2	52·0	*53·1*
17	58·1	54·7	51·1	55·3	64·6	57·2	47·6	54·0	53·1	54·9	56·5	51·0	62·0	63·9	64·5	62·0	60·6	56·6	53·3	52·8	53·1	45·9	53·8	52·0	56·2
18 d	53·0	60·0	45·0	48·2	51·1	62·8	56·1	48·1	46·3	53·6	55·7	60·9	61·0	64·5	65·6	62·6	60·1	57·3	52·8	52·8	55·7	50·9	58·3	61·3	56·0
19	52·3	53·8	53·5	58·3	53·5	49·4	54·5	51·6	53·8	53·8	59·1	63·2	64·7	65·1	63·6	66·4	58·6	62·0	57·3	57·1	56·4	56·5	50·8	55·6	57·1
20	53·0	54·5	44·9	50·1	50·1	51·1	55·4	54·7	52·5	54·1	53·9	58·2	61·2	62·6	63·2	61·0	58·5	58·4	58·8	58·3	58·4	55·5	56·4	53·6	55·8
21	48·1	54·0	63·5	58·3	55·7	56·9	58·6	58·2	55·6	53·9	54·5	60·3	62·9	64·9	62·9	59·0	59·2	56·5	53·2	52·9	48·2	50·9	55·6	56·5	56·8
22 d	56·6	56·6	57·5	54·4	55·8	58·6	57·3	52·7	54·7	31·3	41·4	61·0	64·4	64·3	60·6	58·5	53·6	58·0	59·0	55·3	58·5	55·6	55·8	58·7	55·8
23	56·7	56·6	42·9	46·6	54·8	50·2	49·9	46·1	47·5	51·1	54·4	57·4	62·0	63·8	65·5	60·1	59·1	56·6	51·5	55·1	58·3	56·9	56·2	56·5	54·8
24	55·6	53·9	54·9	56·9	57·4	53·9	56·7	58·9	57·8	54·7	55·6	59·7	61·7	62·3	61·0	57·3	54·4	54·5	52·0	50·3	52·0	53·8	54·0	54·5	56·0
25	54·3	53·8	55·5	55·4	52·9	51·6	51·0	50·7	50·7	54·6	58·0	61·9	62·7	66·5	62·3	60·8	58·7	52·9	54·7	55·6	56·3	53·7	55·4	56·1	56·1
26	54·7	53·8	53·0	53·1	53·5	55·3	52·9	51·1	50·3	54·1	57·2	59·4	61·2	62·6	61·0	59·4	56·5	54·3	53·9	55·7	56·5	57·3	56·6	54·9	55·8
27	54·0	52·8	51·0	46·2	49·9	48·4	47·6	49·3	55·4	56·9	58·3	60·0	61·6	61·7	60·8	58·7	56·8	56·3	56·5	56·9	56·5	57·2	56·8	55·7	55·2
28	54·7	53·7	54·3	54·3	52·4	51·1	49·4	48·5	49·3	51·9	56·6	61·6	64·7	66·4	66·4	63·6	58·7	58·4	59·1	59·3	58·0	54·8	55·5	53·6	56·5
29	50·7	50·2	51·1	44·8	49·4	49·3	50·2	49·3	50·0	54·6	58·9	63·7	67·1	66·9	65·3	65·2	61·3	58·6	58·7	58·5	57·8	56·3	55·4	54·8	56·2
30 q	53·1	53·5	53·1	53·8	50·5	49·2	47·5	49·5	49·4	52·1	56·5	61·9	64·7	65·1	63·6	61·5	58·8	56·5	56·6	56·5	55·7	54·8	55·5	55·2	55·6
31	54·9	54·7	53·9	52·2	52·9	51·7	49·3	47·2	47·3	53·0	57·3	61·6	65·5	67·2	65·4	63·4	61·1	60·5	59·7	58·4	55·8	57·6	52·6	53·3	56·5
Mean	54·5	54·0	52·7	52·7	52·9	51·5	50·5	*50·2*	50·8	52·2	55·3	60·6	64·2	*65·9*	65·4	63·1	60·5	58·6	57·0	56·9	56·6	56·0	55·9	55·0	56·4

TERRESTRIAL MAGNETIC FORCE: VERTICAL COMPONENT

Mean values for periods of sixty minutes ending at exact hours, G.M.T.

143 ESKDALEMUIR (V) — 44,000γ (0·44 C.G.S. unit) + — AUGUST

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1	1143	1119	1126	1140	1151	1155	1154	1137	1131	1127	1127	1126	1125	1131	1143	1153	1165	1164	1160	1165	1173	1165	1161	1159	1146
2	1157	1156	1154	1153	1153	1153	1152	1148	1144	1138	1138	1124	1116	1125	1137	1159	1165	1166	1167	1162	1156	1156	1150	1150	1149
3	1153	1153	1153	1154	1158	1157	1154	1150	1143	1138	1134	1131	1125	1135	1151	1161	1166	1165	1165	1167	1162	1156	1154	1154	1152
4	1147	1144	1147	1149	1149	1149	1147	1146	1144	1137	1135	1131	1136	1147	1154	1157	1157	1158	1153	1149	1149	1149	1150	1152	1147
5 q	1148	1148	1148	1146	1148	1150	1150	1152	1146	1135	1131	1130	1131	1135	1141	1147	1144	1153	1156	1153	1152	1152	1150	1151	1146
6	1150	1152	1152	1153	1154	1155	1153	1148	1141	1134	1134	1130	1131	1136	1142	1147	1154	1156	1154	1154	1159	1158	1153	1148	1148
7	1138	1142	1143	1148	1140	1137	1142	1141	1137	1134	1119	1113	1110	1113	1127	1138	1142	1146	1154	1153	1154	1152	1149	1148	1138
8 q	1143	1131	1137	1143	1148	1152	1149	1148	1150	1147	1140	1132	1130	1142	1159	1169	1172	1165	1158	1152	1150	1148	1148	1149	1148
9 q	1149	1149	1148	1148	1152	1153	1149	1147	1143	1136	1132	1124	1116	1124	1136	1142	1144	1148	1150	1154	1153	1149	1153	1152	1144
10 q	1148	1147	1148	1150	1153	1152	1147	1147	1142	1130	1128	1125	1122	1124	1135	1146	1152	1153	1153	1149	1148	1148	1150	1153	1144
11	1150	1149	1149	1149	1152	1153	1154	1153	1150	1142	1130	1130	1128	1124	1142	1160	1168	1177	1177	1172	1165	1156	1153	1150	1151
12	1148	1137	1125	1089	1081	1087	1089	1093	1117	1125	1131	1137	1140	1142	1149	1165	1170	1166	1159	1156	1156	1162	1164	1168	*1136*
13	1165	1159	1155	1154	1152	1153	1149	1142	1142	1141	1141	1135	1140	1153	1165	1189	1201	1213	1206	1197	1197	1183	1167	1153	1165
14	1149	1129	1113	1136	1143	1154	1159	1155	1154	1150	1147	1142	1142	1149	1167	1185	1197	1208	1207	1191	1178	1166	1160	1156	1160
15 d	1159	1159	1160	1160	1161	1162	1162	1162	1155	1141	1116	1111	1108	1118	1141	1148	1165	1165	1156	1154	1156	1160	1042	1053	1141
16 d	1072	1069	1128	1131	1153	1166	1167	1162	1171	1177	1187	1183	1219	1262	1300	1317	1317	1309	1267	1246	1215	1184	1172	1147	*1197*
17	1129	1105	1110	1111	1111	1105	1154	1163	1153	1167	1172	1176	1184	1195	1216	1250	1263	1300	1269	1240	1214	1143	1140	1149	1176
18 d	1157	1060	1070	1124	1138	1099	1102	1136	1155	1160	1158	1160	1184	1201	1215	1245	1261	1261	1262	1227	1206	1189	1165	1100	1168
19	1135	1159	1156	1131	1136	1148	1147	1149	1159	1155	1158	1167	1182	1193	1196	1231	1281	1252	1250	1225	1203	1188	1131	1135	1178
20	1144	1062	1118	1154	1159	1160	1156	1149	1157	1159	1154	1160	1167	1180	1204	1222	1256	1235	1202	1190	1183	1179	1162	1135	1169
21	1095	1136	1129	1093	1112	1119	1121	1132	1142	1159	1164	1166	1164	1169	1184	1209	1214	1237	1237	1215	1196	1159	1166	1167	1162
22 d	1165	1164	1159	1164	1161	1147	1140	1146	1152	1164	1195	1208	1204	1216	1208	1221	1264	1256	1217	1197	1175	1173	1174	1162	1185
23 d	1087	1010	1047	1066	1051	1094	1124	1140	1154	1160	1152	1156	1155	1181	1226	1227	1203	1215	1217	1196	1179	1176	1173	1164	1148
24	1148	1149	1152	1149	1135	1137	1148	1150	1150	1162	1168	1169	1175	1188	1203	1207	1206	1196	1196	1199	1185	1164	1161	1162	1169
25	1153	1130	1109	1111	1135	1154	1165	1165	1169	1162	1164	1155	1155	1162	1180	1202	1219	1215	1198	1192	1183	1177	1159	1154	1165
26	1156	1165	1169	1168	1167	1160	1159	1159	1159	1160	1155	1158	1161	1171	1180	1186	1191	1191	1190	1181	1174	1168	1167	1162	1169
27	1144	1136	1126	1124	1142	1151	1155	1155	1142	1139	1143	1147	1148	1156	1160	1167	1168	1168	1166	1165	1165	1165	1166	1167	1153
28	1166	1165	1164	1161	1160	1160	1161	1164	1158	1150	1142	1137	1136	1141	1150	1163	1171	1172	1173	1170	1170	1176	1177	1168	1161
29	1134	1131	1129	1138	1153	1160	1166	1168	1165	1148	1138	1134	1143	1158	1168	1171	1178	1176	1168	1161	1161	1164	1163	1165	1156
30 q	1162	1164	1160	1155	1154	1158	1161	1162	1160	1159	1155	1149	1149	1153	1160	1165	1165	1166	1163	1161	1162	1162	1160	1160	1159
31	1160	1160	1160	1160	1160	1160	1161	1161	1158	1152	1138	1130	1134	1148	1160	1167	1174	1176	1182	1189	1192	1184	1176	1170	1163
Mean	1144	*1133*	1137	1139	1143	1145	1148	1149	1150	1148	1146	1144	1147	1157	1171	1184	1193	*1195*	1188	1180	1173	1165	1155	1150	1158

DAILY EXTREMES OF TERRESTRIAL MAGNETIC ELEMENTS, MAGNETIC CHARACTER FIGURES AND TEMPERATURE IN MAGNET HOUSE

144 ESKDALEMUIR — AUGUST

	TERRESTRIAL MAGNETIC ELEMENTS												3-hr. range indices K	Sum of K indices	Magnetic character of day (0-2)	Temperature in magnet house 200 +
	Horizontal force					Declination			Vertical force							
	Maximum 16,000γ +		Minimum 16,000γ +		Range	Maximum 11° +	Minimum 11° +	Range	Maximum 44,000γ +		Minimum 44,000γ +		Range			
	h. m.	γ	γ	h. m.	γ	h. m.	′	′	h. m.	′	h. m.	γ	γ	h. m.	γ					°A.
1	20 23	600	456	9 50	144	15 19	75·5	38·9	6 15	36·6	20 58	1175	1118	1 36	57	3,3,4,3,3,4,3,2	25	1	85·9
2	17 32	593	473	10 59	120	14 22	70·9	42·1	6 53	28·8	18 10	1171	1114	12 36	57	1,2,3,3,3,3,3,3	21	1	85·9
3	19 32	584	464	11 29	120	13 45	69·2	46·5	7 2	22·7	19 11	1170	1125	12 21	45	2,1,2,2,3,3,3,2	18	1	85·8
4	21 49	565	468	10 31	97	13 23	69·2	47·9	8 59	21·3	17 5	1159	1130	11 48	29	2,2,2,3,2,3,2,2	18	0	85·9
5 q	18 0	570	497	11 11	*73*	12 59	68·7	48·3	6 41	20·4	18 41	1158	1129	11 22	29	2,2,1,2,3,2,2,1	15	0	86·0
6	17 51	588	458	11 17	130	13 12	69·9	44·1	6 42	25·8	20 52	1162	1126	12 5	36	2,2,2,3,3,3,3,3	21	1	86·0
7	19 26	582	472	10 19	110	13 49	67·9	45·5	6 25	22·4	19 55	1155	1107	13 1	48	2,2,1,2,2,2,3,2	16	0	86·0
8 q	1 5	569	477	11 12	92	13 53	69·7	48·4	5 40	21·3	16 0	1173	1129	12 10	44	3,1,1,2,3,2,1,0	13	0	86·0
9 q	21 7	577	474	11 23	103	14 0	66·3	48·1	8 16	18·2	22 38	1155	1113	12 35	42	1,1,2,2,2,2,1,3	14	0	85·9
10 q	21 19	573	458	11 26	115	14 21	68·3	46·1	8 17	22·2	17 45	1155	1119	12 34	36	1,2,3,3,2,3,2,2	18	0	85·9
11	18 13	581	473	11 52	108	13 54	71·5	43·5	8 10	28·0	18 8	1179	1122	13 10	57	1,2,2,3,3,3,2,3	19	1	85·9
12	1 21	588	430	9 8	158	14 33	68·4	41·1	2 53	27·3	16 32	1172	1075	4 30	97	4,4,3,4,3,3,3,4	28	1	85·9
13	16 55	656	477	11 53	179	16 56	70·5	46·6	0 6	23·9	17 29	1219	1132	11 38	87	3,2,3,2,4,5,3,4	26	1	85·8
14	2 30	579	486	10 21	93	13 19	64·5	48·4	0 1	16·1	18 9	1213	1106	2 30	107	4,2,2,2,2,2,3,3	20	1	85·8
15 d	16 13	*697*	220	22 14	477	16 10	78·2	40·4	23 34	37·8	21 13	1183	950	22 14	233	1,0,1,5,4,6,4,7	28	2	85·8
16 d	16 42	577	*−556*	0 19	*1133*	0 23	*90·7*	27·5	0 39	63·2	16 0	*1328*	*927*	0 11	*401*	9,3,3,4,4,4,4,4	35	2	85·7
17	18 23	641	422	11 52	219	14 47	70·5	35·8	21 30	34·7	17 55	1317	1090	0 58	227	4,4,4,4,4,6,5,5	36	2	85·8
18 d	18 21	625	382	9 18	243	5 16	70·0	41·4	2 28	28·6	18 11	1273	1022	1 55	251	5,5,4,5,5,4,4,4	36	2	85·8
19	15 49	621	412	13 0	209	15 50	68·3	37·5	22 52	30·8	16 32	1288	1093	22 48	195	4,3,4,4,5,6,3,5	34	1	85·7
20	16 13	620	410	1 42	210	14 10	67·7	42·6	2 10	25·1	16 42	1269	1027	1 43	242	5,3,4,3,4,5,3,4	31	1	85·7
21	16 35	605	419	11 22	186	13 29	66·5	36·2	20 38	30·3	18 10	1244	1072	3 14	172	5,4,3,4,3,4,4,4	31	1	85·7
22 d	9 12	660	123	10 35	537	10 38	74·3	*−19·1*	10 30	*93·4*	16 30	1275	1135	24 0	140	3,3,4,7,6,5,4,3	35	2	85·7
23 d	14 11	656	382	3 45	274	1 16	71·3	37·7	2 45	33·6	14 56	1239	983	1 21	256	6,4,3,4,6,4,4,3	34	2	85·7
24	19 11	584	460	7 52	124	13 49	66·0	48·3	18 56	17·7	14 58	1210	1129	4 49	81	3,3,3,3,4,2,3,4	25	1	85·7
25	22 1	565	420	9 35	145	13 49	68·7	47·5	8 23	21·2	16 56	1227	1094	2 50	133	4,3,3,4,4,4,2,3	27	1	85·7
26	23 45	590	453	11 47	137	13 18	63·4	48·6	8 1	*14·8*	17 6	1194	1152	24 0	42	1,2,3,3,3,2,2,3	19	1	85·8
27	0 20	566	493	9 24	73	13 10	63·0	44·3	3 47	18·7	16 52	1170	1119	3 3	51	3,3,3,2,2,2,1,1	17	1	85·8
28	21 13	582	493	10 22	89	14 22	68·1	47·6	7 32	20·5	22 0	1180	1135	11 55	45	1,0,1,2,2,3,2,4	15	0	85·8
29	15 50	588	459	9 58	129	12 26	68·8	42·5	3 44	26·3	16 38	1179	1118	2 45	61	3,3,2,3,3,4,2,2	22	1	85·8
30 q	23 50	556	476	10 27	80	13 43	65·6	45·5	6 11	20·1	17 30	1167	1148	11 42	*19*	2,2,2,2,2,2,2,2	16	0	85·9
31	17 39	604	497	10 41	107	13 20	68·3	45·7	7 39	22·6	20 10	1196	1129	12 10	67	1,2,2,3,3,4,3,3	21	1	85·9
Mean	- -	598	404	- -	194	- -	69·7	41·5	- -	28·2	- -	1205	1096	- -	109	-	-	-	85·8

q denotes an international quiet day and d a international disturbed day.

TERRESTRIAL MAGNETIC FORCE: HORIZONTAL COMPONENT

Mean values for periods of sixty minutes ending at exact hours, G.M.T.

145 ESKDALEMUIR (H) — 16,000γ (0·16 C.G.S. unit) + — SEPTEMBER

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1 q	537	545	545	540	537	527	517	501	485	481	487	501	508	522	534	545	549	554	569	573	554	545	551	546	531
2	546	546	544	542	540	537	525	505	486	474	478	494	514	530	542	545	545	550	558	560	559	561	553	557	*533*
3 d	557	549	550	556	545	529	535	517	395	416	420	453	458	458	469	510	545	596	631	561	521	502	501	530	513
4	493	529	501	495	496	489	446	458	453	437	447	462	485	516	517	525	534	564	545	532	533	529	525	529	502
5	513	504	524	521	523	528	520	493	478	461	442	464	501	490	509	525	536	533	550	553	565	568	557	545	517
6	549	545	531	529	529	525	513	499	493	488	489	506	523	524	532	584	609	532	577	550	529	531	525	532	531
7	513	493	529	525	520	531	521	485	473	469	455	457	477	476	546	556	575	564	593	556	491	495	496	510	513
8	489	529	514	522	523	522	522	526	517	507	500	494	494	500	491	505	515	517	531	536	539	533	533	532	516
9 q	535	524	525	526	528	529	525	518	510	493	484	483	487	498	513	529	537	546	553	556	552	538	536	534	523
10 q	541	533	533	533	536	537	533	521	506	489	481	485	485	496	506	518	529	542	548	550	553	557	554	553	526
11	550	549	549	549	548	546	540	526	514	499	493	498	493	488	521	513	607	548	533	541	539	538	541	548	532
12	548	546	543	542	545	549	549	536	505	489	498	509	518	525	529	535	545	553	553	553	537	513	505	498	530
13	501	489	501	542	533	526	497	453	445	423	411	411	442	457	446	487	493	521	522	521	537	489	518	518	487
14 d	521	526	517	498	504	540	514	465	473	450	405	414	466	481	514	490	545	557	517	533	513	501	517	506	499
15 d	486	474	494	493	512	518	510	453	449	449	436	457	477	474	490	564	493	565	517	525	525	486	521	522	495
16	523	529	521	525	525	506	497	493	510	500	486	480	490	504	515	519	522	554	525	536	527	529	500	493	513
17	532	509	500	525	537	520	501	509	494	483	468	461	470	500	525	548	536	517	550	512	517	493	491	501	508
18	505	513	494	529	545	514	508	498	470	467	453	458	480	478	510	509	529	557	545	540	553	530	513	493	508
19	533	525	517	513	533	530	501	508	485	485	473	466	490	506	500	528	527	544	546	551	554	533	526	514	516
20	533	517	529	528	527	523	533	533	521	505	485	480	491	497	521	522	553	552	540	534	541	533	521	516	522
21	525	530	533	522	540	557	548	552	525	501	501	485	491	493	501	514	528	538	552	532	533	517	537	541	525
22	537	537	537	533	532	544	525	525	518	466	460	463	485	490	485	513	532	529	543	541	525	504	517	510	515
23	505	524	525	536	518	560	557	514	508	486	469	462	477	493	493	498	513	518	529	536	541	545	542	552	517
24 d	557	536	549	545	549	544	544	524	505	486	468	462	493	545	738	881	860	677	557	440	397	355	331	116	527
25 d	257	259	328	387	451	386	332	375	457	474	493	478	458	524	560	557	580	568	517	521	512	489	470	500	*456*
26	508	510	505	500	509	514	510	495	487	473	466	474	492	512	511	521	521	517	523	533	530	529	533	517	508
27	523	521	527	510	517	519	514	510	501	494	486	491	504	529	524	528	528	525	533	539	540	533	530	525	519
28 q	527	536	535	529	527	524	517	509	494	485	472	480	496	510	525	525	540	542	545	549	541	548	532	533	522
29 q	536	538	540	536	536	529	528	525	512	501	498	485	481	490	501	510	530	540	536	537	543	529	521	523	521
30	536	534	539	540	530	530	531	525	509	496	481	473	477	485	497	512	524	533	557	575	552	542	550	545	524
Mean	517	517	519	522	527	524	514	502	489	478	*469*	473	487	500	519	537	*549*	548	547	539	532	520	518	511	515

MAGNETIC DECLINATION (WEST)

Mean values for periods of sixty minutes ending at exact hours, G.M.T.

146 ESKDALEMUIR (D) — 11° + — SEPTEMBER

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′
1 q	51·1	52·0	49·7	50·0	49·6	50·0	49·4	48·7	49·2	52·0	57·3	63·8	67·7	68·4	55·8	63·0	50·5	58·4	59·1	58·8	56·4	56·7	55·6	54·9	56·2
2	55·1	54·6	53·5	52·9	52·0	50·5	48·4	47·3	48·4	51·3	55·3	61·7	65·5	65·5	62·9	59·4	56·2	55·5	56·1	57·2	57·4	58·3	56·3	53·8	55·6
3 d	52·7	49·9	47·5	47·1	43·0	46·6	44·0	37·6	31·1	57·2	66·8	65·4	68·5	70·0	63·9	59·0	61·8	60·0	57·2	54·7	51·0	50·9	57·5	52·8	54·0
4	58·4	55·7	51·1	47·9	50·4	49·3	50·5	49·5	50·9	52·9	55·3	59·9	63·3	65·3	54·9	64·4	61·3	60·6	58·6	52·8	54·5	55·2	53·4	52·9	55·8
5	52·3	56·1	52·2	52·6	53·0	53·4	50·7	48·2	50·2	53·1	58·7	64·1	67·7	65·7	63·6	60·0	55·2	53·1	56·1	57·6	58·1	57·5	57·4	56·1	56·4
6	54·0	50·7	50·7	50·3	50·9	49·5	47·3	46·3	47·5	49·4	53·9	59·7	65·2	67·2	67·2	67·3	64·6	62·6	60·4	56·9	51·8	56·5	56·4	53·1	55·8
7	43·9	53·2	50·4	51·6	53·8	47·7	48·6	48·3	49·3	52·5	56·5	60·6	64·7	65·5	69·8	65·0	64·5	63·9	59·2	47·4	50·9	51·5	52·6	50·1	55·1
8	46·1	45·7	48·7	51·7	53·7	52·8	49·1	46·8	46·0	50·3	53·7	58·3	61·5	63·5	61·5	60·0	58·3	56·5	55·5	55·6	55·7	56·9	56·0	55·5	54·1
9 q	53·8	52·2	52·9	52·3	52·2	51·8	49·9	48·6	47·9	49·9	54·0	58·5	61·9	62·8	62·7	61·0	59·1	56·6	56·0	55·8	56·5	57·4	55·6	54·6	55·2
10 q	52·7	52·0	52·1	51·5	52·1	51·0	49·7	48·6	47·6	50·0	53·7	58·5	61·6	62·8	62·3	60·8	58·5	56·5	55·8	55·8	56·4	56·5	56·0	55·5	54·9
11	55·1	54·5	54·3	53·6	52·9	51·8	49·5	47·3	48·2	51·3	56·4	62·8	66·6	66·5	65·1	61·6	64·4	57·6	56·2	49·9	52·0	54·7	52·7	53·1	55·8
12	55·1	55·0	54·3	52·0	51·4	50·2	47·7	46·8	48·5	54·7	58·3	61·7	63·0	61·3	59·2	57·0	55·3	54·5	56·6	59·7	61·7	53·6	52·6	49·1	55·0
13	46·2	40·7	45·8	47·9	53·8	58·1	57·4	54·4	60·4	61·1	64·8	64·6	66·5	67·1	61·7	59·5	54·5	54·3	55·1	52·1	51·6	43·4	40·4	47·5	54·5
14 d	53·2	55·7	43·6	49·0	57·4	58·9	59·0	58·3	56·0	55·1	61·1	65·6	67·4	62·1	52·5	58·8	59·7	43·2	52·8	55·6	48·9	56·9	44·9	46·5	55·5
15	45·7	57·2	49·9	56·5	52·0	47·9	48·1	49·3	54·9	57·4	59·0	60·5	61·9	63·9	63·4	64·6	56·9	58·8	58·1	59·0	43·9	61·0	54·2	53·6	55·7
16	54·8	56·8	54·7	52·5	52·4	52·0	53·5	53·1	51·9	53·5	56·5	59·9	61·9	61·4	61·0	58·5	55·4	53·8	53·8	55·6	50·0	49·5	50·2	56·6	55·0
17	46·9	48·9	55·8	49·1	49·3	52·0	52·5	51·8	52·0	52·3	57·1	59·4	65·5	65·4	63·8	61·5	56·5	58·7	51·8	48·2	52·0	51·2	45·7	61·0	54·5
18	48·8	45·2	49·7	52·4	48·2	52·9	54·5	52·2	51·7	55·5	58·0	61·5	63·8	61·9	60·8	60·7	58·8	48·4	56·6	50·9	51·8	52·4	55·6	49·9	54·3
19	52·1	53·0	56·5	60·5	56·5	53·8	54·7	53·8	54·8	54·7	56·8	58·3	61·8	62·8	63·4	63·7	58·2	51·9	56·4	49·6	49·1	50·2	54·6	56·1	56·0
20	47·5	50·4	55·2	55·4	56·5	58·5	57·4	51·3	50·9	51·3	53·7	56·0	60·0	61·2	62·0	61·1	53·0	55·5	55·6	56·1	54·8	52·1	45·9	47·5	54·5
21	51·2	54·1	55·7	59·5	61·9	60·4	58·7	53·8	51·1	53·3	53·9	56·6	61·0	62·6	62·9	63·5	58·5	53·8	49·5	54·8	52·7	51·1	51·7	52·0	56·0
22	53·3	54·4	55·0	55·4	56·5	60·0	56·6	60·9	57·4	51·1	57·5	59·0	62·6	65·4	55·6	65·3	55·4	58·3	56·9	49·3	48·6	45·3	49·2	45·9	56·0
23	52·4	49·3	52·6	54·9	54·6	67·2	59·1	55·6	59·0	59·2	60·4	62·7	63·2	63·9	63·0	61·1	58·4	56·7	57·0	56·5	56·3	55·6	54·7	54·5	*57·8*
24 d	45·8	46·4	49·5	55·4	59·3	57·2	57·6	55·8	54·7	55·7	59·6	61·8	66·4	68·2	67·5	73·1	62·8	67·3	38·8	44·3	45·7	47·4	48·4	63·7	56·3
25 d	29·5	25·3	26·4	38·5	52·0	54·5	49·3	38·5	45·7	50·2	59·4	63·6	67·3	68·0	68·0	66·4	62·9	62·5	53·6	53·1	44·9	49·2	46·1	51·1	*51·1*
26	52·1	51·0	53·0	47·5	48·5	49·4	50·1	49·3	50·1	51·9	55·6	60·0	62·8	63·8	60·9	59·4	58·1	57·5	57·4	54·8	56·0	56·9	51·0	49·5	54·4
27	54·2	51·2	41·9	43·9	47·4	49·7	48·8	50·0	49·4	51·1	54·8	60·0	63·6	64·1	60·3	58·1	56·1	55·1	56·6	57·4	56·9	56·1	53·9	52·0	53·9
28 q	52·9	51·1	50·3	51·3	52·0	52·0	50·9	49·3	48·4	49·5	52·2	58·3	63·8	63·4	62·1	59·2	58·2	57·6	57·6	58·0	59·0	54·5	52·4	52·9	54·9
29 q	53·0	52·9	52·0	52·0	52·6	50·3	48·2	47·3	46·6	50·9	54·9	57·3	59·3	60·4	60·8	60·1	57·6	54·9	55·6	55·7	55·5	51·0	48·4	48·3	53·6
30	47·6	52·8	53·7	51·3	52·0	52·2	51·5	49·2	47·4	48·1	49·3	53·1	57·2	59·3	60·5	60·1	59·1	57·5	59·1	62·6	56·5	56·6	55·5	53·8	54·4
Mean	50·6	50·9	50·6	51·5	52·6	53·1	51·8	*49·9*	50·2	52·9	56·8	60·4	63·8	*64·3*	63·3	61·8	58·7	56·7	55·6	54·5	53·2	53·5	52·2	52·8	55·1

TERRESTRIAL MAGNETIC FORCE: VERTICAL COMPONENT

Mean values for periods of sixty minutes ending at exact hours, G.M.T.

147 ESKDALEMUIR (V) — 44,000γ (0·44 C.G.S. unit) + — SEPTEMBER

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1 q	1165	1155	1154	1158	1159	1161	1162	1160	1154	1143	1129	1126	1130	1136	1148	1157	1165	1165	1160	1166	1172	1166	1161	1160	1155
2	1160	1160	1160	1160	1160	1160	1162	1164	1161	1150	1138	1129	1130	1142	1154	1161	1162	1157	1155	1155	1155	1155	1159	1159	1155
3 d	1156	1155	1141	1137	1141	1154	1155	1153	1140	1134	1156	1186	1167	1181	1207	1248	1258	1292	1352	1334	1234	1192	1082	1089	1185
4	1069	1093	1130	1149	1165	1159	1154	1155	1161	1162	1158	1161	1167	1172	1177	1176	1172	1183	1190	1202	1189	1179	1176	1165	1161
5	1131	1135	1148	1158	1165	1167	1166	1166	1165	1159	1155	1149	1156	1177	1186	1195	1202	1202	1189	1177	1171	1166	1164	1164	1167
6	1161	1165	1169	1169	1168	1172	1177	1175	1170	1158	1150	1147	1148	1154	1167	1192	1224	1256	1274	1274	1225	1189	1178	1167	1185
7	1153	1116	1116	1129	1131	1141	1151	1156	1159	1155	1155	1155	1158	1165	1178	1212	1231	1224	1239	1213	1148	1149	1147	1135	1163
8	1084	1132	1159	1170	1173	1177	1182	1179	1177	1159	1156	1156	1155	1155	1158	1165	1171	1174	1173	1172	1172	1169	1168	1168	1163
9 q	1165	1168	1167	1167	1167	1167	1168	1168	1167	1162	1158	1155	1155	1155	1159	1161	1165	1168	1168	1171	1171	1172	1173	1171	1165
10 q	1166	1166	1166	1166	1166	1167	1169	1169	1166	1160	1158	1153	1150	1149	1150	1154	1159	1161	1160	1160	1160	1160	1160	1160	1161
11	1160	1160	1160	1160	1160	1160	1165	1166	1162	1154	1148	1143	1150	1159	1170	1172	1183	1219	1218	1209	1196	1182	1155	1156	1169
12	1160	1164	1156	1155	1159	1164	1162	1160	1157	1160	1154	1154	1158	1160	1166	1167	1169	1175	1179	1185	1200	1196	1190	1190	1168
13	1178	1152	1088	1093	1102	1089	1094	1124	1135	1149	1143	1166	1201	1240	1231	1226	1221	1212	1204	1206	1196	1159	1140	1146	1162
14 d	1151	1116	1129	1127	1106	1099	1123	1119	1112	1123	1148	1169	1207	1225	1226	1234	1267	1316	1232	1201	1214	1173	1148	1113	1170
15 d	1130	1087	1105	1118	1118	1147	1098	1160	1153	1150	1157	1167	1184	1190	1206	1268	1267	1263	1244	1209	1178	1195	1164	1168	1172
16	1168	1157	1158	1168	1172	1174	1172	1174	1173	1168	1165	1165	1165	1166	1167	1172	1179	1195	1203	1197	1195	1166	1146	1118	1170
17	1117	1099	1064	1083	1129	1141	1153	1154	1154	1158	1154	1165	1171	1184	1195	1227	1272	1274	1248	1225	1195	1183	1144	1125	1167
18	1093	1108	1106	1088	1117	1123	1137	1155	1159	1162	1166	1177	1182	1195	1200	1197	1198	1226	1198	1196	1166	1160	1146	1099	1156
19	1153	1160	1160	1153	1137	1156	1165	1170	1166	1177	1177	1178	1179	1188	1186	1189	1206	1209	1190	1184	1168	1160	1159	1118	1170
20	1117	1144	1152	1158	1160	1159	1154	1160	1165	1167	1172	1172	1172	1176	1184	1196	1210	1209	1197	1190	1184	1178	1172	1167	1171
21	1159	1161	1163	1154	1130	1126	1137	1147	1155	1166	1167	1167	1171	1178	1189	1192	1201	1214	1215	1198	1191	1190	1171	1149	1170
22	1159	1164	1166	1166	1166	1154	1159	1160	1157	1168	1173	1173	1170	1177	1192	1207	1237	1215	1196	1201	1187	1171	1161	1140	1176
23	1087	1129	1159	1165	1155	1095	1107	1135	1147	1158	1166	1156	1166	1173	1173	1173	1173	1170	1167	1168	1168	1166	1167	1165	1154
24 d	1155	1152	1148	1147	1139	1143	1147	1160	1161	1170	1171	1185	1202	1243	1346	1401	1436	1385	1318	1126	1082	1058	1089	944	*1188*
25 d	925	1016	1016	979	943	969	1043	1123	1178	1179	1185	1196	1215	1213	1235	1261	1305	1310	1287	1239	1221	1179	1165	1177	*1148*
26	1170	1154	1124	1155	1172	1177	1183	1186	1189	1181	1176	1169	1169	1174	1178	1186	1191	1187	1180	1184	1184	1184	1184	1184	1176
27	1182	1180	1168	1168	1172	1174	1177	1178	1178	1177	1171	1164	1159	1160	1165	1171	1172	1171	1169	1171	1172	1180	1184	1184	1173
28 q	1179	1167	1168	1171	1172	1173	1177	1176	1171	1166	1165	1160	1160	1160	1162	1169	1173	1178	1178	1176	1178	1178	1178	1178	1171
29 q	1177	1172	1171	1168	1165	1166	1167	1166	1163	1155	1153	1154	1156	1161	1167	1179	1187	1194	1191	1189	1184	1184	1180	1155	1171
30	1156	1160	1159	1160	1165	1169	1173	1180	1183	1179	1171	1165	1166	1166	1166	1170	1172	1171	1166	1166	1190	1190	1188	1190	1172
Mean	*1139*	1142	1141	1143	1145	1146	1151	1160	1161	1160	1160	1162	1167	1176	1186	1199	1211	*1216*	1208	1195	1181	1171	1160	1147	1168

DAILY EXTREMES OF TERRESTRIAL MAGNETIC ELEMENTS, MAGNETIC CHARACTER FIGURES AND TEMPERATURE IN MAGNET HOUSE

148 ESKDALEMUIR — SEPTEMBER

	TERRESTRIAL MAGNETIC ELEMENTS												3-hr. range indices K	Sum of K indices	Magnetic character of day	Temperature in magnet house 200 +
	Horizontal force					Declination			Vertical force							
	Maximum 16,000γ +		Minimum 16,000γ +		Range	Maximum 11° +	Minimum 11° +	Range	Maximum 44,000γ +		Minimum 44,000γ +		Range					
	h. m.	γ	γ	h. m.	γ	h. m.	′	′	h. m.	γ	γ	h. m.	γ				°A.	
1 q	19 3	588	476	10 30	112	13 11	69·5	47·3	7 22	22·2	20 6	1173	1124	11 19	49	2,2,2,3,3,2,3,1	18	0	85·9
2	23 29	604	468	9 59	136	13 0	66·7	46·6	7 42	20·1	7 0	1165	1125	12 1	40	2,1,3,3,3,2,2,4	20	0	85·9
3 d	18 47	565	292	8 50	373	13 27	76·3	18·7	8 32	57·6	18 56	1359	1022	22 33	337	3,3,7,6,5,5,5,6	40	2	85·9
4	16 51	592	419	9 6	173	13 50	67·9	47·0	23 23	20·9	19 25	1206	1053	0 1	153	4,4,3,4,5,5,4,3	32	1	85·8
5	18 4	588	430	10 25	158	12 39	68·7	47·1	7 30	21·6	17 10	1207	1126	1 2	81	3,2,3,3,3,3,4,4	25	1	85·8
6	16 50	625	481	10 18	144	13 47	68·8	44·0	6 53	24·8	19 20	1286	1143	11 39	143	3,2,2,3,3,4,4,3	24	1	85·8
7	18 41	636	442	10 58	194	14 54	72·4	38·9	19 43	33·5	19 3	1278	1089	1 44	189	4,3,3,3,5,5,6,3	32	1	85·8
8	1 20	553	468	0 48	85	13 50	64·1	40·4	7 12	23·7	7 2	1184	1057	0 30	127	4,2,4,3,3,3,2,0	21	1	85·8
9 q	0 22	563	480	11 48	83	13 58	63·5	47·6	8 29	*15·9*	22 11	1176	1153	11 59	23	3,0,1,2,2,2,2,1	13	0	85·8
10 q	21 26	561	481	10 25	80	13 28	63·2	47·3	8 8	*15·9*	6 18	1170	1148	13 37	*22*	1,1,2,1,1,2,1,1	10	0	85·8
11	16 32	633	473	13 10	160	12 48	67·8	44·0	19 48	23·8	17 55	1226	1141	11 34	85	0,1,2,3,3,5,4,3	21	1	85·8
12	6 20	563	480	10 10	83	12 6	63·6	44·9	8 24	18·7	20 28	1204	1153	11 06	51	2,2,3,3,2,2,4,3	21	1	85·8
13	20 29	560	391	11 14	169	13 10	70·9	23·3	22 10	47·6	13 36	1251	1070	2 27	181	4,4,4,3,4,3,3,5	30	1	85·8
14 d	17 16	597	371	11 4	226	21 23	69·0	34·8	17 12	34·2	17 0	1340	1090	5 24	250	4,4,4,4,4,5,4,5	34	1	85·8
15 d	14 59	612	406	8 03	206	15 1	80·8	34·1	20 29	46·7	10 38	1308	1060	1 36	248	4,3,5,4,5,5,5,5	36	2	85·8
16	17 59	561	473	7 47	88	12 43	62·5	43·9	21 6	18·6	18 39	1208	1088	23 46	120	3,3,3,2,2,3,3,4	23	1	85·8
17	18 13	649	432	2 30	217	12 54	67·0	38·5	22 25	28·5	17 57	1282	1006	2 52	276	5,5,4,3,4,4,5,5	35	2	85·8
18	17 49	620	442	10 25 / 23 0	178	22 54	70·0	35·4	17 40	34·6	17 40	1246	1059	23 8	187	4,3,3,3,4,5,4,5	31	1	85·8
19	20 4	575	457	11 36	118	15 34	65·1	44·0	20 28	21·1	17 3	1221	1096	24 0	125	3,3,3,2,3,4,3,4	25	1	85·8
20	16 48	575	469	11 29	106	15 8	63·3	43·0	22 58	20·3	16 58	1224	1096	0 1	128	3,3,3,3,3,4,2,3	24	1	85·8
21	22 56	569	478	13 10	91	14 9	64·5	46·6	18 24	17·9	18 10	1221	1124	5 40	97	3,3,3,2,3,3,3,4	24	1	85·8
22	17 03	572	444	10 5	128	13 51	68·1	42·6	19 51	25·5	16 43	1252	1131	24 0	121	1,3,3,3,3,4,4,4	25	1	85·8
23	5 31	587	409	12 32	178	5 16	73·6	45·9	0 1	27·7	15 48	1176	1070	0 30	106	4,5,4,3,5,2,2,2	27	1	85·8
24 d	16 35	*1081*	*-187*	23 24	*1268*	15 39	*122·7*	18·7	18 30	*104·0*	16 12	*1502*	824	23 21	*678*	3,3,4,2,7,8,7,8	42	2	85·8
25 d	17 10	640	77	2 46	563	3 11	72·3	*13·1*	0 36	59·2	16 46	1319	*806*	0 42	513	7,6,6,5,5,5,5,4	43	2	85·8
26	22 4	540	462	10 15	78	13 22	65·5	45·0	3 33	20·5	16 27	1195	1112	2 34	83	4,3,2,2,3,2,2,3	21	1	85·7
27	13 29	552	481	10 43	*71*	13 29	66·4	37·7	2 30	28·7	22 3	1185	1158	12 3	27	4,3,2,2,3,2,2,2	20	1	85·8
28 q	21 33	561	466	10 50	95	12 7	66·7	47·3	8 42	19·4	0 1	1184	1159	12 7	25	2,2,2,3,3,3,2,3	20	1	85·7
29 q	20 07	548	477	11 15	*71*	15 0	66·5	44·2	8 11	22·3	17 32	1195	1147	23 45	48	2,2,1,3,2,3,2,3	18	1	85·7
30	18 11	591	469	11 46	122	19 52	63·8	44·8	0 2	19·0	20 40	1207	1149	0 1	58	3,2,2,2,2,2,4,2	19	1	85·7
Mean	- -	605	414	- -	192	- -	69·7	39·9	- -	29·8	- -	1238	1086	- -	152	-	-	1·03	85·8

q denotes an international quiet day and d an international disturbed day.

TERRESTRIAL MAGNETIC FORCE: HORIZONTAL COMPONENT

Mean values for periods of sixty minutes ending at exact hours, G.M.T.

149 ESKDALEMUIR (H) — 16,000γ (0·16 C.G.S. unit) + — OCTOBER

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1	537	531	525	529	524	533	549	505	489	485	478	453	474	506	517	518	533	542	555	575	527	538	516	495	518
2 d	505	486	485	497	525	510	482	481	470	443	437	443	455	490	525	627	565	557	552	481	486	462	470	407	493
3	336	471	462	490	485	494	494	499	474	442	433	434	462	505	498	500	501	509	523	529	530	550	518	514	486
4	517	517	517	525	526	525	527	515	495	476	459	458	465	482	505	513	523	531	534	538	537	534	530	533	512
5	530	530	530	533	533	537	537	521	506	490	478	477	491	501	517	522	533	540	542	544	547	541	540	546	524
6	545	542	540	540	540	543	541	533	513	489	477	463	479	495	501	521	529	541	548	553	549	537	540	544	525
7	541	544	541	542	544	544	545	544	533	500	478	482	485	495	505	521	547	560	531	543	536	524	533	537	527
8	529	529	533	534	541	547	545	544	525	501	496	485	493	510	513	504	521	541	533	533	544	548	549	541	527
9 d	530	530	533	536	537	549	536	537	525	501	475	457	458	458	489	565	564	573	505	497	504	506	486	466	513
10 d	470	457	491	509	515	501	506	481	450	446	452	451	465	438	479	494	525	509	506	499	454	491	470	513	*482*
11	514	479	477	490	493	502	508	476	470	469	460	465	497	485	503	551	544	506	505	515	516	465	472	465	493
12 d	474	466	526	512	524	505	470	481	477	462	450	458	489	517	485	506	533	517	521	517	492	512	517	529	497
13	521	520	528	535	525	538	526	508	504	498	490	476	481	489	501	516	565	530	510	516	515	529	502	487	513
14	493	506	525	525	529	510	501	514	506	472	437	456	474	466	492	493	521	505	530	520	485	491	485	521	498
15 d	515	516	521	524	517	526	513	537	521	503	489	479	432	485	506	533	521	504	501	510	516	529	609	490	512
16	517	513	514	517	533	537	520	521	518	490	469	458	481	490	510	537	521	522	518	525	529	533	531	536	514
17	529	522	524	533	541	542	537	521	505	490	476	483	493	490	498	517	523	522	529	515	525	533	536	536	517
18	531	532	528	527	531	538	537	536	512	485	489	485	489	501	509	516	529	526	525	511	512	554	517	529	519
19	525	529	531	538	529	533	544	537	509	474	466	489	504	476	513	530	525	540	517	514	508	506	516	527	516
20	525	525	529	529	533	526	514	517	501	489	485	478	482	484	510	521	525	531	526	529	525	525	522	533	515
21	499	514	521	521	522	532	524	517	509	494	487	485	481	498	506	517	517	514	527	532	533	541	544	533	515
22	537	550	540	538	533	541	540	533	517	503	500	497	490	500	501	515	522	533	537	541	542	541	542	536	526
23	533	533	533	536	538	533	544	533	520	495	490	473	476	493	512	517	521	536	514	519	510	527	532	529	519
24	525	546	528	536	521	525	525	525	521	492	486	497	498	502	509	518	526	541	545	552	550	534	529	527	523
25	542	530	529	532	531	533	534	532	522	507	498	496	502	513	521	529	538	540	548	546	540	545	543	541	529
26 q	539	538	538	538	539	542	536	536	524	497	493	496	506	516	529	534	540	546	548	550	546	549	545	542	532
27 q	542	540	541	541	544	544	541	533	519	501	496	500	512	527	537	539	542	545	548	549	552	551	552	552	535
28 q	549	547	548	547	546	546	544	537	525	512	509	507	512	521	533	535	538	543	547	550	554	556	554	553	538
29 q	549	545	548	550	550	552	547	541	529	512	509	511	524	531	535	536	547	553	545	553	551	552	550	550	540
30 q	548	548	548	549	549	549	547	546	539	525	513	512	518	526	537	538	549	540	549	549	550	551	553	552	541
31	553	552	549	550	549	545	541	544	537	525	524	531	534	527	539	544	552	550	549	550	551	548	540	541	*543*
Mean	519	522	525	529	531	532	528	522	509	489	480	*479*	487	497	511	527	533	*534*	531	531	526	529	527	523	518

MAGNETIC DECLINATION (WEST)

Mean values for periods of sixty minutes ending at exact hours, G.M.T.

150 ESKDALEMUIR (D) — 11° + — OCTOBER

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′
1	43·0	46·4	45·4	39·3	48·4	51·8	52·1	50·2	48·1	50·2	55·5	57·6	59·7	61·9	62·6	59·9	59·4	58·0	57·2	62·1	55·6	62·9	46·0	48·3	53·4
2 d	39·9	39·8	38·2	42·0	43·0	48·4	47·1	50·4	52·6	54·5	62·0	65·6	69·5	69·2	67·2	58·3	62·5	60·8	61·8	50·2	52·2	45·3	36·4	39·9	52·4
3	41·9	46·6	39·4	44·0	50·8	44·0	49·7	45·6	43·2	47·1	52·0	55·6	59·7	65·5	61·3	59·3	56·6	55·7	55·7	55·6	56·1	52·9	44·6	49·1	*51·3*
4	51·1	52·0	52·9	52·9	51·3	51·3	49·4	47·2	46·3	46·8	51·0	55·8	60·4	62·0	62·9	61·2	58·4	56·7	56·9	56·5	55·6	54·6	53·8	53·2	54·2
5	53·0	53·2	53·3	53·8	53·0	52·9	52·0	49·2	47·8	48·9	52·8	56·2	61·0	62·7	63·7	61·1	58·9	58·0	56·5	56·4	56·2	54·6	53·0	50·8	54·9
6	51·3	51·2	53·0	52·0	53·0	53·3	51·2	48·9	46·9	47·1	50·2	54·6	60·3	63·3	63·4	62·5	60·1	57·9	57·0	56·2	55·7	52·2	53·1	52·6	54·5
7	52·2	52·7	52·6	53·0	53·1	52·9	52·5	50·2	48·4	49·2	51·8	54·7	58·4	60·3	61·8	61·9	61·5	61·9	58·3	61·5	54·6	43·9	53·7	53·8	54·8
8	53·0	51·4	51·9	50·5	52·7	51·2	52·1	51·8	50·8	49·3	52·1	54·8	59·4	63·2	62·0	60·3	59·4	56·5	57·4	56·7	56·7	55·8	55·1	52·7	54·9
9 d	47·2	51·1	44·6	44·4	49·5	51·9	54·7	56·6	59·4	56·6	58·2	61·4	67·2	67·7	64·7	60·6	68·2	66·2	57·2	54·8	52·0	47·3	48·4	41·3	55·5
10 d	45·5	50·9	49·4	47·7	47·5	53·6	55·6	55·6	53·7	55·1	62·0	61·8	64·1	65·6	67·3	65·5	59·1	55·9	57·0	55·4	40·1	47·7	36·5	42·1	53·9
11	48·3	46·4	53·5	52·5	57·4	52·9	53·8	51·3	50·0	54·3	55·9	57·5	61·9	63·1	64·6	51·7	53·0	59·0	55·6	58·1	48·7	43·7	45·0	42·7	53·4
12 d	50·2	42·0	43·9	52·9	52·1	56·3	66·4	66·5	55·4	52·9	56·4	59·7	63·4	64·8	61·0	58·4	51·0	54·5	45·0	45·9	47·6	49·3	51·7	51·9	54·1
13	49·3	55·4	55·7	50·7	56·5	61·5	59·3	56·9	52·9	51·0	54·5	56·6	58·7	59·3	58·5	57·4	59·1	46·6	43·2	52·8	53·6	40·1	42·9	45·9	53·3
14	49·1	51·8	57·7	53·4	52·9	63·8	72·1	56·3	52·0	53·8	56·7	60·5	63·1	63·5	63·7	58·2	57·0	53·9	45·2	48·2	37·8	39·5	44·6	45·0	54·2
15 d	50·2	52·8	52·9	53·1	57·7	59·4	57·6	54·7	56·1	51·6	55·2	59·2	63·0	63·7	57·4	58·9	61·9	55·6	51·2	56·1	53·9	45·6	49·4	50·1	55·3
16	46·6	46·4	50·2	54·7	55·1	55·1	54·6	54·8	53·9	52·7	53·9	57·9	60·2	63·1	61·8	52·7	56·4	55·3	54·7	55·6	54·8	53·7	53·1	55·1	54·7
17	57·5	54·8	52·0	52·9	54·9	53·6	53·0	51·7	50·2	51·9	56·4	61·1	63·3	61·8	62·1	56·6	57·7	55·7	48·2	52·8	53·7	53·8	53·3	52·6	55·1
18	52·9	54·7	54·6	55·4	54·9	54·4	53·1	51·5	52·1	54·6	58·3	61·0	62·8	63·8	62·8	52·5	54·8	56·7	54·8	50·3	50·2	52·0	47·7	47·5	54·7
19	52·2	54·0	55·5	55·5	53·0	54·0	55·5	53·8	53·1	58·0	61·0	65·9	66·3	64·0	63·8	62·4	58·2	59·9	63·1	45·9	44·7	49·2	52·0	54·5	*56·5*
20	54·9	58·8	58·2	54·9	50·9	52·1	52·2	52·9	53·8	53·8	56·3	61·1	64·1	63·8	63·4	55·6	54·7	54·7	54·8	50·9	48·5	46·4	52·8	48·6	54·9
21	47·6	45·6	49·2	52·1	53·9	53·0	52·9	51·9	49·4	50·1	53·6	58·2	60·1	61·4	60·2	59·3	57·2	52·1	49·6	53·7	55·1	54·9	52·1	51·2	53·5
22	53·7	53·1	51·1	49·5	52·1	54·6	51·7	51·0	50·3	53·8	56·6	59·9	61·2	63·7	61·7	59·5	58·1	56·5	56·1	55·4	55·4	55·1	53·6	51·0	55·2
23	50·2	51·5	52·8	52·1	52·2	57·5	54·2	49·3	49·7	50·1	54·9	58·4	61·0	62·8	60·2	60·5	57·5	56·5	59·7	52·0	54·5	53·8	54·4	52·9	54·9
24	53·2	43·9	47·1	49·3	52·0	52·0	51·2	49·4	49·3	52·5	55·6	60·8	63·4	62·7	61·0	58·7	57·1	56·5	57·4	57·3	56·9	55·5	53·6	52·5	54·5
25	49·2	50·5	51·2	52·2	53·0	52·5	51·8	50·9	49·3	50·0	52·2	56·7	59·3	60·3	59·9	58·4	57·5	56·7	57·2	57·5	56·4	55·2	53·9	54·2	54·4
26 q	52·9	53·1	53·5	53·3	52·1	52·2	52·9	52·7	51·9	52·1	54·6	57·4	59·1	59·4	59·1	57·5	56·4	56·5	56·6	56·6	56·5	55·4	54·9	54·8	55·1
27 q	54·7	54·1	53·8	53·8	53·5	52·9	52·2	51·0	50·2	52·0	55·2	58·5	60·5	60·6	59·4	57·6	56·9	57·0	56·6	56·2	55·6	55·7	55·4	55·4	55·4
28 q	54·7	53·8	54·3	54·2	54·0	53·3	52·6	51·2	50·4	51·5	54·5	57·1	59·0	58·8	57·8	57·5	57·3	57·1	56·8	56·4	56·4	56·0	55·5	54·9	55·2
29 q	54·5	54·2	54·2	54·0	53·8	53·3	52·6	51·3	50·1	50·7	53·4	57·6	59·6	60·7	59·5	58·1	58·3	59·1	58·0	58·5	57·4	56·0	55·1	55·0	55·6
30 q	54·4	54·1	53·9	53·7	53·4	53·3	52·8	52·4	51·3	51·0	53·3	55·8	57·9	58·3	58·6	57·5	58·0	58·7	58·1	56·6	55·8	55·4	54·9	54·0	55·1
31	54·2	53·9	53·9	53·3	52·6	53·6	52·9	52·0	51·2	52·0	55·3	58·7	60·1	59·3	59·9	58·8	58·4	57·5	56·7	56·5	55·7	54·7	52·9	52·1	55·3
Mean	50·6	51·0	51·3	51·4	52·6	53·6	53·9	52·2	51·0	51·8	55·2	58·6	61·5	*62·6*	61·7	58·7	58·1	56·9	55·3	54·8	53·0	51·5	50·6	*50·5*	54·5

TERRESTRIAL MAGNETIC FORCE: VERTICAL COMPONENT

Mean values for periods of sixty minutes ending at exact hours, G.M.T.

151 ESKDALEMUIR (V) — 44,000γ (0·44 C.G.S. unit) + — OCTOBER

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1	1194	1182	1160	1129	1112	1129	1149	1159	1165	1162	1155	1155	1155	1154	1157	1163	1166	1170	1170	1171	1213	1230	1201	1184	1166
2 d	1182	1164	1161	1159	1129	1123	1125	1140	1149	1161	1171	1184	1207	1231	1257	1316	1303	1291	1275	1233	1202	1201	1125	1051	1189
3	981	1083	1089	1087	1027	1064	1129	1159	1177	1186	1195	1202	1202	1214	1212	1203	1197	1190	1185	1183	1182	1166	1154	1167	*1151*
4	1176	1178	1178	1175	1174	1176	1183	1186	1187	1185	1184	1177	1172	1169	1172	1178	1183	1181	1181	1180	1178	1178	1180	1178	1179
5	1178	1177	1177	1177	1177	1178	1180	1183	1183	1178	1171	1166	1162	1162	1166	1171	1173	1172	1174	1173	1173	1177	1177	1173	1174
6	1166	1165	1168	1171	1172	1172	1176	1182	1185	1178	1172	1164	1160	1162	1164	1173	1176	1174	1172	1172	1172	1177	1177	1172	1172
7	1172	1170	1169	1169	1170	1170	1170	1173	1174	1173	1170	1162	1159	1160	1161	1166	1173	1185	1201	1198	1209	1196	1185	1179	1176
8	1179	1178	1177	1176	1171	1164	1165	1169	1173	1173	1166	1162	1160	1161	1170	1178	1179	1182	1183	1183	1176	1170	1168	1166	1172
9 d	1165	1123	1108	1117	1129	1142	1149	1154	1154	1161	1165	1171	1186	1219	1243	1269	1269	1329	1311	1291	1268	1226	1203	1172	*1197*
10 d	1155	1064	1099	1153	1146	1152	1148	1161	1167	1172	1176	1196	1213	1227	1241	1258	1286	1267	1227	1222	1239	1149	1089	1111	1180
11	1130	1105	1100	1087	1117	1131	1157	1170	1176	1175	1173	1183	1189	1202	1213	1267	1275	1255	1252	1238	1209	1166	1161	1158	1179
12 d	1110	1114	1083	1148	1159	1158	1137	1130	1147	1161	1166	1175	1195	1233	1228	1216	1233	1226	1231	1184	1185	1186	1171	1152	1172
13	1153	1154	1135	1147	1147	1128	1143	1159	1166	1172	1166	1168	1172	1177	1185	1190	1220	1249	1238	1203	1195	1177	1155	1143	1173
14	1110	1124	1147	1160	1166	1147	1124	1147	1166	1171	1184	1186	1191	1170	1219	1216	1208	1201	1207	1183	1174	1166	1164	1116	1169
15 d	1147	1164	1171	1167	1166	1149	1154	1167	1166	1175	1172	1183	1197	1203	1230	1233	1240	1245	1231	1210	1197	1186	1125	1111	1183
16	1137	1146	1147	1149	1148	1153	1162	1167	1173	1176	1179	1186	1191	1195	1202	1231	1215	1204	1199	1190	1183	1178	1177	1172	1177
17	1159	1139	1153	1153	1150	1158	1164	1172	1178	1173	1166	1164	1176	1187	1197	1217	1208	1203	1204	1196	1190	1185	1179	1177	1177
18	1172	1167	1166	1167	1165	1165	1169	1169	1170	1169	1160	1161	1165	1173	1182	1207	1205	1198	1201	1209	1170	1186	1173	1173	1177
19	1167	1167	1167	1162	1161	1163	1162	1167	1172	1166	1160	1159	1167	1179	1189	1206	1225	1237	1267	1255	1185	1187	1183	1171	1184
20	1161	1149	1132	1149	1160	1167	1177	1172	1172	1172	1172	1169	1176	1183	1188	1204	1206	1196	1190	1190	1182	1161	1155	1122	1171
21	1130	1141	1144	1150	1161	1161	1171	1178	1181	1173	1165	1160	1164	1165	1171	1177	1185	1194	1195	1186	1183	1177	1173	1164	1169
22	1159	1147	1150	1159	1159	1159	1164	1171	1172	1166	1161	1161	1165	1167	1170	1172	1174	1173	1172	1173	1173	1172	1172	1166	1166
23	1161	1161	1166	1167	1167	1159	1153	1160	1165	1165	1160	1166	1171	1178	1186	1196	1206	1203	1209	1214	1202	1188	1180	1173	1177
24	1161	1124	1138	1138	1152	1163	1170	1173	1173	1167	1157	1153	1160	1172	1177	1176	1178	1174	1172	1171	1172	1178	1182	1182	1165
25	1174	1170	1167	1167	1167	1169	1171	1173	1176	1173	1165	1161	1160	1162	1164	1168	1169	1170	1171	1172	1177	1174	1174	1173	1169
26 q	1172	1169	1167	1167	1166	1167	1167	1167	1170	1171	1165	1161	1161	1162	1163	1165	1165	1165	1166	1166	1167	1167	1166	1166	1166
27 q	1166	1166	1166	1165	1165	1165	1166	1170	1172	1166	1156	1153	1153	1155	1159	1161	1160	1159	1161	1161	1161	1162	1164	1165	1162
28 q	1166	1166	1164	1162	1161	1162	1162	1166	1168	1166	1161	1156	1159	1159	1159	1160	1159	1159	1159	1159	1159	1160	1160	1160	1161
29 q	1161	1161	1160	1159	1159	1159	1159	1160	1160	1156	1150	1143	1145	1152	1156	1159	1158	1159	1165	1163	1164	1165	1164	1162	1158
30 q	1162	1162	1161	1160	1159	1159	1156	1155	1159	1159	1152	1144	1145	1150	1155	1164	1163	1161	1160	1162	1161	1161	1160	1161	1158
31	1160	1160	1160	1160	1160	1159	1159	1158	1159	1155	1148	1146	1149	1155	1155	1162	1160	1160	1160	1161	1161	1166	1172	1171	1159
Mean	1154	1150	*1149*	1153	1152	1154	1159	1165	1169	1169	1167	1167	1172	1179	1187	1197	1201	*1201*	1200	1192	1186	1178	1167	1158	1172

DAILY EXTREMES OF TERRESTRIAL MAGNETIC ELEMENTS, MAGNETIC CHARACTER FIGURES AND TEMPERATURE IN MAGNET HOUSE

152 ESKDALEMUIR — OCTOBER

	TERRESTRIAL MAGNETIC ELEMENTS												3-hr. range indices *K*	Sum of *K* indices	Magnetic character of day (0-2)	Temperature in magnet house 200 +
	Horizontal force					Declination			Vertical force							
	Maximum 16,000γ +		Minimum 16,000γ +		Range	Maximum 11° +	Minimum 11° +	Range	Maximum 44,000γ +		Minimum 44,000γ +		Range			
	h. m.	γ	γ	h. m.	γ	h. m.	′	′	h. m.	′	h. m.	γ	γ	h. m.	γ				°A.
1	19 36	636	438	11 42	198	19 41	71·0	35·2	3 19	35·8	21 43	1235	1098	4 41	137	4,4,4,4,4,3,5,5	33	1	85·7
2 d	15 9	*701*	359	23 50	342	18 44	*76·3*	25·0	22 33	*51·3*	15 19	1334	1033	23 50	*301*	3,4,3,4,5,5,6,5	35	2	85·7
3	21 28	578	*137*	0 22	*441*	0 18	68·2	*23·2*	0 36	45·0	13 40	1216	*925*	0 19	291	7,5,4,3,4,1,2,4	30	2	85·7
4	18 3	547	451	12 19	96	14 32	63·9	44·8	8 26	19·1	8 40	1188	1165	13 20	23	2,2,3,2,3,2,2,1	17	0	85·7
5	23 58	558	464	10 57	94	14 38	64·7	47·3	8 26	17·4	8 32	1185	1160	12 41	25	1,1,2,2,2,2,1,2	13	0	85·7
6	19 54	563	456	11 0	107	13 4	65·9	44·8	8 48	21·1	8 46	1186	1158	12 58	28	2,2,3,3,3,2,2,2	19	1	85·5
7	17 33	592	470	10 59	122	13 32	65·5	40·4	21 20	25·1	20 36	1221	1159	12 39	62	1,1,2,2,2,4,4,4	20	1	85·5
8	5 11	564	477	11 12	87	14 8	65·6	48·4	9 8	17·2	18 38	1185	1159	12 30	26	2,3,2,2,3,3,2,2	19	1	85·5
9 d	17 55	696	419	13 43	277	17 55	75·6	32·3	21 3	43·3	17 56	*1397*	1099	1 59	298	4,3,3,4,4,6,5,5	34	2	85·5
10 d	16 50	571	406	13 1	165	14 31	70·8	31·6	22 37	39·2	16 33	1300	1047	1 31	253	5,4,4,4,4,4,4,5	34	2	85·5
11	15 10	573	442	11 4	131	14 25	69·1	36·7	20 8	32·4	16 12	1285	1072	3 10	213	5,4,3,3,3,3,4,5,4	31	1	85·5
12 d	18 51	571	402	1 44	169	7 3	74·6	26·9	18 51	47·7	18 44	1249	1062	1 59	187	5,3,4,3,4,4,5,3	31	1	85·5
13	16 19	595	469	11 41	126	5 0	63·8	26·0	21 36	37·8	18 16	1261	1124	5 22	137	4,4,3,3,1,4,4,5	28	1	85·5
14	19 0	573	418	10 13	155	6 11	74·8	34·1	20 14	40·7	14 59	1221	1106	0 32	115	4,4,5,4,3,3,5,4	32	1	85·5
15 d	22 8	661	405	12 19	256	12 44	65·9	37·7	22 4	28·2	17 48	1250	1098	23 20	152	3,4,4,3,5,4,3,6	32	1	85·5
16	15 35	573	440	11 20	133	12 53	64·0	44·8	0 17	19·2	15 27	1242	1124	0 1	118	3,3,2,3,3,4,2,2	22	1	85·5
17	5 43	548	466	10 43	82	11 49	65·1	45·0	18 16	20·1	15 24	1219	1135	1 3	84	3,2,3,2,3,3,3,1	20	1	85·5
18	21 44	560	474	11 23	86	14 1	65·3	42·5	22 55	22·8	15 46	1214	1159	10 55	55	1,2,2,3,2,3,3,4	20	1	85·5
19	19 49	593	441	19 32	152	18 4	67·9	29·3	18 40	38·6	19 11	1306	1155	11 12	151	2,2,3,3,3,4,6,3	26	1	85·5
20	22 54	563	471	11 13	92	12 36	65·5	37·5	21 2	28·0	16 14	1209	1118	23 16	91	3,3,3,2,3,3,4,4	25	1	85·6
21	23 3	556	475	12 25	81	12 59	62·1	40·4	0 54	21·7	17 52	1198	1121	0 1	77	4,2,2,2,2,3,3,3	21	1	85·6
22	1 49	557	486	14 0	71	13 6	65·2	48·7	3 29	16·5	16 28	1175	1141	1 55	34	3,3,2,2,3,2,1,2	18	0	85·6
23	6 6	549	465	11 23	84	18 16	63·7	45·5	19 44	18·2	19 16	1219	1149	6 6	70	2,3,3,3,3,3,4,2	23	1	85·6
24	1 12	568	482	10 21	86	12 24	64·0	41·6	1 9	22·4	22 50	1183	1119	1 20	64	4,2,2,2,2,2,1,2	17	1	85·6
25	0 34	561	488	11 26	73	13 16	63·2	44·7	0 31	18·5	0 1	1179	1159	12 8	20	3,0,1,2,2,2,2,1	13	0	85·6
26 q	19 16	553	490	10 39	63	13 10	60·1	51·0	9 1	*9·1*	9 29	1173	1159	11 48	*14*	1,1,1,0,1,1,0,0	5	0	85·6
27 q	23 59	556	486	10 44	70	12 56	62·0	49·2	8 54	12·8	8 13	1173	1153	11 51	20	0,0,1,2,2,1,0,0	6	0	85·6
28 q	20 7	560	505	11 39	55	12 33	59·9	50·1	8 51	9·8	8 52	1170	1153	11 37	17	1,0,0,1,2,2,2,0	8	0	85·6
29 q	19 22	559	505	10 11	54	13 10	61·9	49·3	9 7	12·6	18 52	1167	1143	11 40	24	1,1,0,1,1,2,2,0	8	0	85·6
30 q	22 2	561	509	11 12	52	14 54	59·9	50·1	9 22	9·8	15 39	1167	1142	11 59	25	0,0,1,1,1,2,1,1	7	0	85·2
31	19 13	561	514	12 6	*47*	12 40	63·8	48·6	8 3	15·2	22 28	1173	1144	11 47	29	0,2,2,2,3,2,2,2	15	0	85·1
Mean	- -	579	449	- -	131	- -	66·1	40·4	- -	25·7	- -	1222	1121		101	-	-	0·81	85·5

q denotes an international quiet day and d an international disturbed day.

TERRESTRIAL MAGNETIC FORCE: HORIZONTAL COMPONENT

Mean values for periods of sixty minutes ending at exact hours, G.M.T.

153 ESKDALEMUIR (H) — 16,000γ (0·16 C.G.S. unit) + — NOVEMBER

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1	549	545	543	544	544	545	541	535	528	521	516	514	515	524	532	536	541	546	547	549	555	536	524	530	536
2	540	541	540	555	551	543	543	537	525	507	496	495	503	510	522	530	535	540	547	549	548	547	543	543	533
3 q	543	542	544	544	545	544	545	541	536	517	514	507	515	529	532	538	539	544	545	535	539	547	549	559	537
4	546	535	536	540	543	543	544	539	531	516	505	497	504	520	524	519	529	532	533	540	544	543	540	542	531
5 q	543	540	540	544	541	543	540	536	528	517	511	513	520	529	531	532	535	537	547	550	549	547	544	546	536
6 q	543	544	545	545	545	545	544	540	534	525	517	517	523	532	538	540	543	548	552	553	552	548	545	547	540
7 q	545	546	545	549	549	549	548	547	545	543	540	540	539	536	541	540	546	544	546	548	552	551	552	556	*546*
8 d	548	543	543	550	551	555	543	547	530	515	515	509	508	509	512	500	513	521	519	513	512	513	524	525	526
9 d	539	536	521	535	536	530	544	535	528	504	520	531	478	514	492	480	470	479	497	511	475	430	292	381	494
10 d	356	393	470	482	484	476	477	488	488	476	463	480	485	498	514	504	515	492	516	518	565	515	475	460	*483*
11 d	466	441	508	512	515	520	518	525	519	516	515	509	491	529	525	527	519	493	492	504	510	499	512	515	507
12	503	508	531	492	513	529	514	505	498	495	495	495	499	495	489	503	512	511	520	525	520	534	532	521	510
13	520	509	513	527	530	533	531	524	509	508	488	478	504	506	508	508	520	520	547	530	532	532	534	536	519
14	526	528	533	532	532	536	536	532	532	507	501	505	501	496	497	514	510	530	526	517	510	520	518	528	519
15	528	528	548	531	538	536	541	535	508	500	503	502	503	508	515	522	535	534	531	532	530	536	530	527	525
16	542	535	531	539	541	531	531	532	531	507	495	498	494	500	510	508	511	519	531	535	535	531	543	535	524
17	523	528	528	528	535	542	539	532	523	517	503	498	506	515	521	520	527	531	538	542	543	543	542	539	528
18	538	540	534	547	539	536	539	531	523	532	526	522	527	528	526	519	523	528	530	532	523	533	528	538	531
19 d	531	535	536	537	532	547	519	507	502	496	492	490	488	493	499	506	516	507	514	496	495	512	531	522	513
20	524	523	523	524	523	523	523	525	515	507	491	483	500	504	512	519	528	518	523	532	534	532	521	527	518
21	531	531	538	537	533	537	537	534	528	514	508	507	513	519	519	525	538	536	517	516	517	527	531	530	526
22	529	529	531	527	531	531	531	530	528	523	523	512	509	514	516	512	519	523	524	531	531	535	535	534	525
23	532	532	535	542	543	542	539	519	526	527	523	515	518	520	528	523	523	531	531	534	539	538	551	547	532
24	531	531	534	534	535	537	542	539	534	528	517	516	521	524	527	532	539	544	556	534	499	521	539	520	531
25	521	524	524	523	524	527	527	532	530	520	508	519	520	520	523	528	534	542	544	547	547	540	538	534	529
26 q	529	533	534	530	530	527	526	526	527	526	530	522	522	525	531	537	543	549	549	545	544	535	534	533	533
27	524	525	529	534	532	537	542	541	538	533	526	514	515	524	533	543	549	550	560	563	555	555	548	544	538
28	541	541	541	543	549	549	550	548	545	534	530	526	527	529	538	541	545	543	549	550	550	549	548	546	542
29	547	541	540	556	552	548	557	544	540	531	527	529	527	534	541	541	542	549	535	530	539	527	530	534	539
30	538	537	535	537	538	542	539	541	541	530	521	516	517	526	530	537	542	549	530	526	529	526	537	534	533
Mean	526	525	532	534	535	*536*	535	532	526	516	511	*509*	510	517	521	523	528	530	533	533	532	530	526	528	526

MAGNETIC DECLINATION (WEST)

Mean values for periods of sixty minutes ending at exact hours, G.M.T.

154 ESKDALEMUIR (D) — 11° + — NOVEMBER

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′
1	50·8	51·8	53·7	53·0	53·3	52·6	52·6	52·1	51·1	52·8	54·8	58·8	58·8	59·6	58·4	58·3	57·3	56·5	56·4	56·1	55·5	52·1	50·1	51·8	54·5
2	53·4	52·4	54·7	51·3	49·5	51·7	51·5	52·0	50·6	51·8	53·9	56·7	59·2	59·6	59·3	57·8	56·6	56·5	56·4	56·0	55·4	54·8	54·3	53·9	54·6
3 q	54·4	54·4	54·0	54·0	53·9	53·7	53·2	52·1	51·3	51·0	54·0	56·2	57·6	58·3	58·2	58·4	57·1	56·8	56·8	54·9	54·4	53·9	52·5	50·6	54·7
4	48·5	50·4	52·7	53·6	53·1	53·3	53·0	52·7	51·7	52·4	55·6	58·4	61·3	61·7	62·0	55·4	58·3	57·8	56·6	55·4	54·8	54·4	53·3	52·6	55·0
5 q	53·8	53·3	55·1	53·1	54·2	53·8	52·9	52·1	51·4	53·1	55·9	58·3	59·2	58·3	57·8	56·5	56·1	55·9	56·2	55·9	55·2	54·8	54·5	53·7	55·0
6 q	54·0	53·8	53·9	53·7	53·4	52·9	52·8	52·6	52·0	52·0	53·8	55·8	57·1	56·9	56·6	56·1	55·7	55·7	56·0	55·8	55·3	54·8	54·4	54·1	54·5
7 q	53·8	53·6	53·6	53·8	53·8	53·5	53·1	52·9	52·3	52·7	54·9	57·4	57·6	57·4	57·4	56·2	56·6	56·3	55·4	56·0	56·1	54·8	53·3	49·8	54·7
8 d	51·2	49·2	51·8	50·3	51·5	53·1	55·2	56·9	53·7	52·9	56·6	58·2	60·5	63·0	64·4	62·0	57·8	56·7	55·1	51·4	48·5	45·4	50·2	50·1	54·4
9 d	54·1	49·0	49·0	47·3	46·6	53·8	55·7	53·2	52·0	54·2	57·8	62·0	62·4	66·9	60·8	65·6	60·6	52·9	51·3	55·9	47·3	35·2	42·7	51·9	53·7
10 d	39·9	44·2	45·1	51·0	52·5	53·9	57·7	53·4	51·9	52·3	53·3	55·9	57·9	57·3	54·9	58·1	57·9	48·4	50·7	54·0	55·6	52·7	43·5	49·2	*52·1*
11 d	45·5	49·3	44·9	52·1	52·2	51·7	52·9	53·5	52·8	53·0	55·7	57·9	57·8	65·9	60·8	65·5	59·9	48·4	57·6	55·3	53·5	50·6	49·0	52·4	54·1
12	50·7	50·2	48·3	48·4	54·1	54·7	54·5	55·4	54·7	52·9	53·4	56·2	58·4	58·4	57·8	57·4	55·5	52·8	52·9	52·9	52·2	53·5	52·0	50·0	53·6
13	49·3	52·0	53·8	53·7	52·8	52·6	52·0	52·0	51·1	53·7	55·9	57·5	57·2	58·7	57·9	57·0	54·2	55·0	49·5	51·8	54·3	53·9	52·9	52·0	53·8
14	52·5	53·9	55·2	54·8	54·6	54·3	53·6	53·6	53·3	52·4	54·9	58·0	59·2	61·7	61·9	60·3	57·4	52·2	54·9	53·1	50·5	50·0	49·2	52·3	54·7
15	53·0	52·9	54·2	51·6	52·9	53·8	53·1	53·3	53·3	52·8	54·3	57·1	58·7	59·7	59·4	57·4	56·5	56·4	53·8	54·8	54·8	53·0	51·0	47·9	54·4
16	53·9	49·2	50·2	52·0	52·7	53·8	55·5	55·6	55·7	55·1	55·4	58·8	60·0	60·6	60·8	58·9	57·9	58·1	55·8	54·7	54·2	53·6	53·7	49·1	*55·2*
17	51·1	52·2	53·5	55·5	55·9	54·0	53·3	52·7	52·0	52·8	54·7	56·8	57·1	58·4	59·3	58·1	57·4	57·9	56·5	55·5	54·8	54·1	53·5	53·4	55·0
18	53·9	52·0	54·7	54·8	52·4	52·4	52·4	52·7	54·0	52·1	54·0	55·6	58·8	59·4	59·7	59·9	59·9	60·4	56·7	54·4	54·5	51·9	49·5	49·4	54·8
19 d	51·8	53·8	53·7	54·4	56·1	55·8	54·6	56·7	55·4	53·7	55·6	59·0	60·8	60·6	59·2	56·9	55·0	57·4	53·5	52·8	50·4	49·7	49·8	50·2	54·9
20	52·8	52·5	51·9	53·8	53·7	52·2	52·0	51·3	50·9	51·1	53·5	55·5	57·0	59·0	58·6	57·0	55·1	54·1	53·6	54·3	54·0	49·3	48·3	51·2	53·4
21	52·8	53·8	54·6	52·9	52·6	52·9	52·0	51·9	51·1	50·3	52·4	55·6	59·1	59·4	59·6	58·3	53·8	59·2	60·3	57·3	54·3	53·3	53·9	53·9	54·8
22	54·0	53·7	53·1	52·7	52·8	53·2	52·6	52·0	51·8	51·9	53·5	55·0	57·2	59·4	59·1	56·8	55·3	55·9	56·1	55·1	54·7	53·8	53·8	53·9	54·5
23	54·1	53·2	53·6	52·6	53·3	52·0	52·8	55·1	59·4	55·4	55·1	56·9	58·2	58·4	58·3	58·4	57·4	56·7	56·4	55·0	54·9	53·7	51·8	51·8	55·2
24	51·2	52·0	52·2	52·4	52·7	52·9	52·5	52·1	51·1	51·9	54·0	55·1	57·3	57·9	57·5	56·8	56·1	55·6	59·5	52·7	48·0	52·2	51·0	45·7	53·3
25	58·4	52·9	53·5	52·3	51·6	51·8	52·5	51·5	52·4	52·7	52·8	54·7	56·3	56·9	56·5	55·9	54·6	54·7	54·7	54·9	55·4	54·6	53·7	53·3	54·1
26 q	52·5	51·0	52·2	52·4	52·8	52·3	52·3	52·8	52·4	51·3	53·0	55·0	57·0	57·2	56·9	56·4	56·1	55·6	56·4	55·5	55·8	54·7	51·1	49·2	53·8
27	49·8	51·2	52·9	54·5	52·5	52·7	52·4	51·5	51·0	50·3	51·9	54·7	56·9	57·4	57·7	56·9	56·2	55·4	55·6	55·1	54·7	54·5	53·9	53·7	53·9
28	53·3	52·6	53·8	53·8	54·1	53·8	53·3	53·0	52·6	51·2	52·5	55·5	56·5	57·1	58·7·	58·3	58·3	57·5	56·3	55·5	54·5	53·8	52·8	53·0	54·7
29	52·8	52·1	52·9	50·9	50·2	51·2	52·1	52·9	52·0	51·2	52·8	55·3	57·2	58·3	59·0	58·2	57·9	58·3	59·3	55·0	54·3	50·9	48·0	50·7	53·9
30	52·9	53·6	53·8	53·7	53·3	52·9	52·8	52·0	51·3	50·9	53·3	54·8	57·3	58·3	58·4	57·6	56·5	56·9	53·8	51·8	52·1	50·6	52·4	52·0	53·9
Mean	52·0	51·9	52·5	52·7	52·8	53·1	53·2	53·1	52·5	52·4	54·3	56·8	58·3	*59·4*	58·9	58·2	56·8	55·7	55·5	54·6	53·7	52·1	*51·3*	51·4	54·3

TERRESTRIAL MAGNETIC FORCE: VERTICAL COMPONENT

Mean values for periods of sixty minutes ending at exact hours, G.M.T.

155 ESKDALEMUIR (V) — 44,000γ (0·44 C.G.S. unit) + — NOVEMBER

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1	1168	1166	1165	1164	1161	1160	1160	1151	1162	1155	1156	1155	1155	1156	1160	1160	1159	1159	1159	1159	1160	1170	1174	1170	1161
2	1165	1162	1159	1149	1149	1153	1155	1158	1162	1164	1158	1155	1155	1158	1160	1164	1162	1160	1160	1160	1160	1160	1161	1160	1159
3 q	1159	1160	1160	1160	1160	1160	1159	1159	1164	1159	1150	1153	1153	1154	1157	1160	1160	1158	1160	1165	1165	1160	1155	1144	1158
4	1139	1148	1154	1159	1159	1159	1159	1159	1160	1159	1157	1156	1156	1161	1167	1183	1176	1173	1172	1170	1166	1164	1162	1160	1162
5 q	1159	1160	1159	1159	1160	1161	1161	1164	1165	1162	1161	1163	1163	1165	1165	1164	1161	1160	1160	1160	1160	1161	1162	1162	1162
6 q	1162	1161	1160	1160	1159	1159	1159	1160	1161	1162	1158	1155	1158	1159	1159	1158	1156	1156	1155	1157	1158	1159	1160	1160	1159
7 q	1160	1159	1159	1158	1158	1159	1159	1159	1161	1158	1153	1150	1152	1154	1155	1156	1158	1159	1159	1159	1160	1161	1162	1156	*1158*
8 d	1151	1152	1150	1152	1153	1153	1153	1152	1156	1160	1159	1165	1168	1171	1176	1197	1200	1201	1204	1205	1195	1177	1164	1155	1170
9 d	1148	1135	1148	1149	1149	1152	1151	1154	1160	1162	1160	1159	1176	1202	1240	1236	1245	1230	1213	1200	1225	1135	1043	1068	1168
10 d	1076	1060	1119	1153	1162	1166	1162	1171	1181	1187	1190	1193	1199	1215	1231	1207	1204	1226	1209	1190	1171	1141	1123	1094	1168
11 d	1081	1065	1130	1146	1159	1160	1164	1166	1166	1167	1165	1169	1177	1190	1270	1272	1304	1307	1243	1216	1173	1167	1176	1158	*1183*
12	1159	1135	1119	1135	1148	1149	1160	1166	1171	1181	1178	1176	1174	1183	1187	1190	1189	1187	1185	1179	1180	1173	1165	1159	1168
13	1155	1155	1149	1154	1156	1159	1163	1158	1173	1167	1172	1177	1178	1179	1184	1186	1186	1184	1179	1173	1172	1171	1170	1163	1170
14	1166	1166	1164	1162	1165	1165	1164	1163	1164	1166	1165	1171	1176	1188	1186	1188	1195	1195	1184	1182	1189	1184	1182	1177	1175
15	1173	1167	1155	1144	1149	1155	1160	1161	1162	1161	1162	1162	1164	1167	1171	1173	1171	1172	1174	1173	1173	1169	1167	1168	1165
16	1159	1155	1153	1147	1147	1152	1155	1155	1156	1160	1165	1171	1177	1178	1179	1184	1185	1182	1179	1177	1174	1173	1167	1154	1166
17	1162	1162	1161	1160	1160	1163	1165	1166	1167	1164	1161	1161	1164	1163	1168	1174	1172	1169	1168	1167	1167	1166	1166	1167	1165
18	1166	1166	1165	1160	1161	1162	1162	1164	1163	1156	1153	1154	1157	1162	1168	1176	1178	1180	1185	1186	1184	1178	1173	1172	1168
19 d	1167	1166	1165	1165	1159	1136	1139	1144	1149	1163	1171	1174	1182	1190	1190	1197	1201	1207	1208	1213	1215	1201	1179	1166	1177
20	1161	1159	1159	1161	1166	1167	1169	1171	1172	1172	1171	1172	1173	1169	1171	1177	1178	1178	1180	1175	1173	1174	1172	1167	1170
21	1166	1165	1160	1159	1160	1159	1159	1164	1166	1164	1158	1159	1160	1165	1173	1176	1183	1180	1194	1198	1203	1191	1179	1174	1171
22	1172	1172	1171	1170	1167	1167	1167	1167	1167	1165	1164	1166	1166	1167	1173	1174	1178	1182	1183	1179	1178	1173	1170	1167	1171
23	1166	1166	1165	1162	1160	1161	1161	1162	1157	1154	1154	1156	1159	1161	1162	1168	1168	1168	1171	1171	1170	1170	1165	1158	1163
24	1160	1165	1165	1162	1162	1163	1164	1164	1165	1158	1154	1156	1156	1160	1163	1165	1165	1162	1163	1196	1200	1197	1189	1186	1168
25	1182	1179	1177	1173	1170	1167	1166	1164	1162	1161	1160	1159	1161	1161	1166	1171	1171	1166	1166	1166	1166	1166	1168	1171	1167
26 q	1171	1170	1167	1166	1166	1166	1166	1165	1165	1160	1154	1156	1161	1164	1165	1166	1165	1164	1165	1166	1166	1171	1173	1172	1165
27	1171	1169	1167	1166	1165	1161	1158	1155	1157	1157	1155	1154	1156	1159	1162	1165	1161	1160	1160	1159	1159	1161	1165	1166	1161
28	1165	1165	1162	1160	1159	1158	1156	1156	1156	1155	1149	1150	1153	1154	1156	1162	1161	1161	1161	1161	1162	1153	1162	1160	1159
29	1160	1161	1160	1157	1149	1148	1148	1152	1155	1156	1151	1149	1151	1155	1161	1166	1165	1163	1172	1178	1177	1182	1177	1171	1161
30	1165	1164	1162	1161	1161	1160	1160	1160	1160	1159	1155	1155	1155	1156	1159	1164	1164	1161	1172	1178	1179	1177	1171	1166	1163
Mean	1157	*1155*	1157	1158	1159	1159	1159	1161	1163	1163	1161	1162	1165	1169	1176	1179	*1181*	1180	1178	1177	1176	1170	1163	1159	1166

DAILY EXTREMES OF TERRESTRIAL MAGNETIC ELEMENTS, MAGNETIC CHARACTER FIGURES AND TEMPERATURE IN MAGNET HOUSE

156 ESKDALEMUIR — NOVEMBER

	TERRESTRIAL MAGNETIC ELEMENTS															3-hr. range indices K	Sum of K indices	Magnetic character of day (0-2)	Temperature in magnet house 200 +
	Horizontal force						Declination						Vertical force						
	Maximum 16,000γ +			Minimum 16,000γ +		Range	Maximum 11° +			Minimum 11° +		Range	Maximum 44,000γ +			Minimum 44,000γ +		Range				
	h. m.	γ		γ	h. m.	γ	h. m.	′		′	h. m.	′	h. m.	γ		γ	h. m.	γ					°A.
1	20 18	553		497	11 52	66	13 5	62·9		47·7	22 0	15·2	22 6	1178		1153	12 58	25	2,1,2,3,2,1,2,3	16	1	85·1
2	4 3	560		492	11 1	68	13 41	60·2		46·7	3 56	13·5	0 1	1167		1147	3 45	20	2,3,2,2,2,1,1,1	14	1	85·1
3 q	23 16	563		499	11 8	64	15 10	60·2		48·8	23 32	11·4	20 15	1169		1140	24 0	29	0,1,0,2,2,2,2,2	11	0	85·0
4	0 3	560		493	11 15	67	14 10	63·2		47·4	0 57	15·8	15 33	1189		1137	0 9	52	2,0,1,2,2,3,2,2	14	1	85·0
5 q	19 32	553		505	10 52	48	12 16	60·9		51·2	8 32	9·7	15 15	1166		1158	0 21	*8*	1,1,1,2,2,0,1,1	9	0	84·9
6 q	19 27	555		515	10 43	40	12 57	57·4		51·5	9 27	*5·9*	9 17	1165		1154	11 20	11	0,0,0,1,1,1,0,0	3	0	84·9
7 q	23 2	575		534	13 49	41	14 20	58·7		46·9	23 33	11·8	22 49	1165		1149	11 54	16	0,0,1,1,1,1,1,3	8	0	84·9
8 d	3 57	557		488	13 49	69	14 38	66·5		42·7	21 32	23·8	18 44	1208		1149	7 9	59	2,2,2,2,3,3,3,3	20	1	84·9
9 d	19 4	568		*37*	23 0	*531*	13 20	70·8		*24·8*	21 7	*46·0*	20 33	1263		*921*	23 0	*342*	3,3,2,4,4,4,5,7	32	2	84·7
10 d	20 44	627		254	1 7	373	20 59	65·9		28·4	1 46	37·5	13 59	1232		996	1 7	236	6,3,3,3,3,4,5,5	32	2	84·7
11 d	14 7	*633*		406	1 12	227	14 7	*77·5*		39·2	17 40	38·3	16 47	*1348*		1029	0 59	319	5,3,3,3,5,5,5,3	32	2	84·7
12	22 38	553		475	3 39	78	12 56	61·0		41·2	3 6	19·8	15 29	1191		1110	2 56	81	3,4,2,2,2,3,2,3	21	1	84·7
13	18 51	559		461	11 9	98	13 23	59·6		46·8	18 46	12·8	16 28	1189		1143	2 11	46	3,2,2,3,1,2,3,2	18	1	84·6
14	17 53	540		483	13 18	57	13 59	62·9		48·4	21 51	14·5	16 59	1198		1160	3 15	38	1,1,1,2,2,3,3,2	15	1	84·6
15	2 43	578		491	10 3	87	13 11	62·0		43·7	23 25	18·3	18 40	1177		1139	3 3	38	3,2,3,2,2,2,2,3	19	1	84·6
16	22 47	593		478	10 12	115	14 13	62·0		47·1	23 50	14·9	15 45	1186		1143	4 10	43	3,2,2,3,2,2,1,4	19	1	84·6
17	5 42	548		493	11 50	55	14 29	60·5		48·3	0 1	12·2	15 28	1175		1159	2 59	16	2,2,2,2,2,1,1,0	12	0	84·5
18	3 13	550		511	15 2	39	16 0	61·9		47·9	23 2	14·0	19 22	1188		1151	10 40	37	2,2,2,1,2,2,2,2	15	1	84·5
19 d	5 9	559		479	12 20	80	13 22	64·3		47·3	22 50	17·0	19 49	1219		1130	5 51	89	2,3,3,2,2,3,2,3	20	1	84·4
20	21 51	550		472	11 1	78	13 36	59·8		44·5	21 44	15·3	17 52	1183		1156	2 5	27	2,1,1,3,1,2,2,3	15	1	84·4
21	16 54	547		504	19 32	43	18 19	63·1		48·4	9 35	14·7	20 23	1204		1158	10 55	46	1,1,1,2,1,3,3,2	14	1	84·4
22	21 43	540		503	12 31	37	14 29	60·2		50·1	9 55	10·1	18 4	1183		1162	9 52	21	0,0,0,2,2,1,2,1	8	0	84·2
23	22 55	571		506	8 8	65	8 41	60·5		50·1	22 47	19 10	19 10	1173		1153	8 52	20	1,1,3,2,2,2,1,3	15	1	84·2
24	18 0	586		484	20 32	102	19 29	62·8		32·2	19 55	30·6	19 50	1226		1151	10 30	75	1,0,0,1,0,3,5,3	13	1	84·1
25	20 10	571		501	10 8	70	4 11	57·4		45·8	0 10	11·6	0 18	1184		1155	11 38	29	3,1,2,2,1,1,1,1	12	0	84·1
26 q	17 57	554		518	11 59	36	14 41	58·1		48·6	23 11	9·5	22 28	1176		1151	10 48	25	2,0,1,2,1,1,1,2	10	0	84·1
27	18 41	576		510	11 31	66	14 19	58·3		48·3	8 44	10·0	0 39	1172		1151	11 11	21	2,1,2,2,2,2,2,2	15	0	84·1
28	3 54	557		522	11 30	*35*	12 59	59·6		50·3	9 54	9·3	1 32	1166		1147	10 30	19	1,2,1,1,2,1,1,0	9	0	84·0
29	6 18	570		518	12 33	52	14 15	61·3		47·1	22 42	14·2	21 20	1184		1147	11 32	37	2,2,2,1,2,2,3,2	16	1	83·9
30	17 36	554		507	21 28	47	14 29	58·5		45·9	19 7	12·6	20 43	1184		1153	11 1	31	0,1,1,2,2,2,3,3	14	1	83·9
Mean	- -	566		471	- -	94	- -	61·9		45·2	- -	16·7	- -	1194		1132	- -	62	-	-	0·77	84·5

q denotes an international quiet day and d an international disturbed day.

TERRESTRIAL MAGNETIC FORCE: HORIZONTAL COMPONENT

Mean values for periods of sixty minutes ending at exact hours, G.M.T.

157 ESKDALEMUIR (H) — 16,000γ (0·16 C.G.S. unit) + — DECEMBER

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1	538	541	535	537	540	543	543	543	542	505	518	531	526	525	530	534	541	543	545	544	542	542	541	537	536
2	535	535	535	540	538	538	539	537	538	530	527	514	524	530	530	527	519	527	537	542	541	537	533	530	533
3 q	535	536	532	533	535	536	540	537	541	533	530	528	526	531	536	539	542	542	545	545	542	542	543	537	537
4	538	541	538	539	541	543	554	562	562	555	540	541	537	529	537	537	539	526	534	541	541	533	534	537	541
5	541	554	542	534	565	550	555	550	542	537	522	522	528	533	524	527	537	533	533	538	537	543	538	510	537
6 d	526	499	514	514	534	535	537	539	538	516	510	514	501	491	490	498	503	505	480	493	514	530	527	526	*514*
7	524	526	529	526	529	533	536	534	513	518	514	507	509	509	510	522	529	524	514	506	518	534	535	531	522
8	529	531	531	532	536	541	548	542	535	524	523	515	516	524	527	529	529	529	533	533	536	538	537	540	532
9 d	537	540	551	553	551	548	551	554	545	536	514	506	519	506	489	521	521	509	504	512	533	515	522	525	528
10	521	528	537	534	539	541	529	532	525	509	494	514	518	517	517	523	525	538	541	539	535	538	524	525	527
11	525	529	534	533	541	549	544	540	537	529	512	502	505	507	505	517	525	521	509	510	525	533	535	538	525
12 d	529	525	536	528	542	542	549	538	534	526	519	514	481	517	514	521	500	514	517	516	526	525	513	527	523
13 d	532	533	540	544	543	541	536	529	538	512	506	500	501	493	506	512	510	516	534	530	522	529	532	534	524
14	536	534	532	537	542	550	538	525	513	497	496	487	497	509	497	502	512	522	526	523	521	525	534	529	520
15	525	541	541	544	544	544	544	533	529	523	522	519	519	518	504	508	512	526	525	529	523	526	538	536	528
16	538	538	538	538	551	541	547	546	542	529	514	510	517	522	525	529	533	538	541	541	542	541	540	541	535
17 q	540	542	544	545	545	548	548	542	538	532	527	528	534	534	530	529	528	532	536	538	540	540	538	540	537
18	546	549	541	545	549	549	545	540	540	537	533	529	527	525	530	532	536	541	543	534	524	533	536	541	538
19	536	542	541	541	543	557	545	540	538	525	519	519	519	523	521	522	518	528	529	525	524	535	540	540	532
20 q	537	538	537	539	540	542	541	539	539	533	528	528	527	527	526	520	523	528	532	536	538	534	540	543	534
21 q	542	543	541	543	544	545	545	546	543	536	528	531	531	528	531	536	543	547	550	551	551	549	548	546	542
22	544	545	547	548	551	555	555	552	548	544	539	539	539	540	538	530	528	537	537	523	535	539	537	524	541
23 d	514	512	528	536	536	535	528	537	538	542	543	539	545	545	552	536	536	540	547	547	543	545	537	535	537
24	536	535	536	539	545	543	545	544	543	536	533	531	530	535	536	538	543	542	536	539	535	559	545	531	539
25	532	533	536	545	547	548	548	547	546	543	536	532	536	543	544	546	547	552	551	548	551	550	536	537	543
26	535	544	548	548	551	560	556	548	543	545	543	539	539	541	536	535	545	542	544	547	547	545	545	540	544
27	534	535	532	536	535	555	553	550	543	536	530	527	530	534	534	536	540	548	537	531	535	539	544	514	537
28	523	532	535	536	536	537	544	544	538	531	531	531	524	535	538	540	542	544	544	544	544	546	541	529	537
29	530	532	533	534	535	538	541	541	539	538	536	535	532	532	523	507	532	532	542	542	544	571	545	531	536
30	535	535	535	536	539	543	540	539	539	531	527	531	532	538	548	544	543	543	544	547	548	544	539	539	539
31 q	539	539	540	546	548	547	547	547	546	540	537	536	540	542	544	543	542	544	545	542	546	544	543	543	*543*
Mean	533	535	537	538	542	*544*	544	542	539	530	524	*523*	523	525	525	527	530	533	533	533	536	539	537	533	534

MAGNETIC DECLINATION (WEST)

Mean values for periods of sixty minutes ending at exact hours, G.M.T.

158 ESKDALEMUIR (D) — 11° + — DECEMBER

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′
1	52·6	52·2	52·0	53·8	53·0	53·0	52·9	52·8	51·1	52·0	53·9	54·1	56·0	56·6	56·4	57·1	55·7	55·1	55·4	54·1	53·7	53·3	52·8	52·9	53·9
2	52·8	53·0	53·0	53·7	53·6	53·5	53·3	53·1	53·0	52·8	54·4	55·9	59·7	59·2	59·1	59·2	55·5	57·6	55·5	53·8	53·6	50·9	50·9	51·1	54·5
3 q	52·2	52·6	52·3	52·7	52·8	51·9	51·8	53·0	52·8	52·7	53·3	54·7	55·7	56·7	56·4	55·7	54·9	54·6	54·3	53·9	53·7	52·9	52·5	53·0	53·6
4	53·0	53·2	52·2	53·0	53·0	53·5	53·8	53·7	53·2	52·0	52·7	54·7	56·0	55·5	56·5	55·5	55·7	56·5	54·8	54·5	52·0	49·4	50·3	52·1	53·6
5	53·5	58·0	51·1	55·2	50·3	51·8	53·3	53·3	52·9	54·7	56·2	56·4	57·7	58·1	57·9	56·8	56·4	54·7	51·9	53·7	52·0	52·8	50·4	45·3	53·9
6 d	44·6	34·6	38·6	46·8	53·9	53·5	53·6	53·6	53·5	55·6	58·9	60·8	62·0	60·1	60·8	62·5	59·8	56·9	53·3	48·9	51·2	39·6	37·0	44·7	*51·9*
7	51·3	53·7	54·6	54·7	53·9	54·1	54·5	54·2	53·4	52·1	52·6	54·2	55·8	56·2	56·5	58·1	51·8	57·4	58·3	52·0	54·7	53·5	52·9	52·8	54·3
8	52·6	52·2	53·1	53·1	53·0	52·7	59·2	55·2	52·1	51·1	53·1	54·7	54·8	57·5	56·0	54·9	54·4	54·4	54·0	54·0	52·9	52·5	51·8	51·9	53·8
9 d	53·0	52·9	52·9	52·0	50·3	53·6	56·5	54·7	54·0	53·1	53·7	58·1	58·1	60·4	56·6	55·5	55·4	51·8	53·0	52·4	48·2	47·9	48·1	50·1	53·4
10	50·2	52·5	54·8	52·9	51·2	52·1	52·8	53·8	53·9	52·9	53·7	57·3	58·2	58·2	57·5	56·5	54·5	54·2	53·7	53·0	52·0	49·7	45·5	47·6	53·3
11	48·6	51·5	52·3	53·8	55·6	55·6	54·5	53·1	51·1	51·9	52·7	56·4	57·8	58·7	56·9	56·7	55·8	56·2	55·4	55·1	46·7	52·2	52·0	47·4	53·7
12 d	47·6	52·0	54·6	52·0	55·4	53·1	53·9	54·3	54·2	53·3	53·6	55·7	60·1	60·0	59·5	58·0	57·0	56·3	56·4	52·0	54·9	50·0	47·9	51·1	54·3
13 d	50·9	51·5	54·8	54·7	52·2	53·8	54·7	55·5	56·7	55·5	54·5	55·8	57·4	57·6	58·8	56·6	52·9	52·8	53·2	52·7	48·5	47·6	51·8	51·9	53·9
14	52·5	53·1	53·8	54·9	52·8	53·3	54·0	55·5	55·6	55·0	55·3	57·7	60·3	57·5	55·5	55·4	54·7	53·0	53·8	53·0	50·3	51·3	50·2	49·5	54·1
15	50·9	48·5	51·8	52·0	52·5	53·8	54·3	53·8	52·5	52·1	53·1	53·2	56·0	56·7	55·8	56·7	57·2	55·0	51·9	52·9	50·5	49·4	51·9	49·8	53·0
16	51·8	51·9	52·2	52·7	52·6	52·3	52·5	53·6	53·3	52·0	52·7	53·4	54·9	56·9	56·7	55·5	54·7	54·0	53·8	53·7	53·2	52·8	52·3	52·3	53·4
17 q	52·0	52·5	51·9	52·3	52·8	53·8	52·1	52·5	52·3	52·2	52·7	54·9	56·9	57·9	58·1	57·4	55·7	55·0	54·7	53·9	53·5	52·6	51·9	50·3	53·7
18	50·2	49·2	52·0	52·0	52·5	53·0	53·3	53·1	52·6	54·3	55·1	57·4	57·4	57·0	56·4	55·2	54·5	54·2	54·3	53·8	51·8	52·6	51·1	45·9	53·3
19	49·3	51·1	53·0	53·9	54·7	53·8	53·9	53·7	54·3	52·7	53·0	56·6	57·3	58·7	58·7	59·0	57·9	56·7	55·7	54·8	53·8	52·9	52·8	52·8	*54·6*
20 q	52·3	52·5	52·8	52·3	52·9	53·7	53·1	53·3	52·8	52·2	53·3	55·7	57·0	58·7	58·7	58·3	57·4	55·7	55·7	54·1	52·9	52·1	52·0	51·7	54·2
21 q	52·2	52·1	52·5	52·9	52·9	52·8	52·7	52·7	52·1	52·5	53·0	53·7	54·0	55·4	56·4	55·5	54·8	54·3	53·9	53·7	53·1	52·9	52·9	52·9	53·4
22	53·0	53·3	53·3	53·1	53·0	52·9	52·3	52·2	52·0	51·8	52·9	54·3	56·9	58·4	58·5	58·6	59·1	56·2	57·4	56·2	53·7	52·9	52·1	45·4	54·1
23 d	47·9	46·3	50·1	52·0	52·1	51·9	52·7	52·3	51·2	51·1	53·2	53·3	56·9	57·6	62·5	59·2	59·3	56·6	55·0	53·9	53·4	51·7	50·4	50·2	53·4
24	51·3	52·0	51·9	51·5	52·1	52·0	52·0	51·8	51·6	52·6	53·4	54·2	54·5	55·2	55·7	55·7	55·7	54·9	53·7	54·4	54·4	48·6	50·5	49·8	52·9
25	52·0	52·1	53·1	53·0	52·1	52·0	52·0	52·1	52·0	52·1	52·9	54·7	56·1	57·8	56·8	55·6	55·7	56·4	55·7	56·6	53·7	53·7	53·6	52·9	53·9
26	52·1	52·2	50·3	52·5	52·7	52·1	53·6	53·0	53·3	54·0	55·6	55·0	55·8	58·5	56·4	56·5	56·6	56·9	53·3	52·1	53·9	53·0	52·8	50·7	53·9
27	47·1	49·4	49·3	52·7	50·1	51·8	53·3	51·3	52·0	52·2	55·5	54·5	56·5	57·1	57·1	55·6	54·8	56·6	56·5	54·7	54·6	52·3	50·9	47·2	53·0
28	48·3	52·6	53·9	53·6	52·4	52·6	52·9	52·7	52·4	52·8	53·6	55·3	55·9	57·0	57·3	56·1	55·2	54·4	53·7	52·9	52·1	52·2	46·7	48·7	53·1
29	50·6	51·0	51·9	51·1	53·1	53·0	52·3	52·2	52·2	54·0	55·6	56·5	56·4	57·7	60·2	58·2	57·6	55·7	53·4	52·6	50·3	45·9	49·4	50·2	53·4
30	52·3	52·4	53·2	53·3	53·5	52·9	53·0	52·9	52·4	52·7	53·8	56·1	56·5	57·1	56·5	55·6	55·0	54·8	54·6	53·4	52·6	52·7	52·6	52·0	53·8
31 q	52·3	52·6	53·2	54·0	53·2	53·2	53·1	52·7	52·9	53·3	53·5	54·3	55·1	55·1	55·8	55·3	55·1	54·3	54·3	53·6	52·8	52·7	52·3	52·1	53·6
Mean	51·0	51·4	52·1	52·9	52·8	53·0	53·5	53·3	52·9	52·9	53·9	55·5	56·9	*57·6*	57·5	56·9	55·8	55·3	54·5	53·6	52·4	51·1	50·7	*50·2*	53·6

TERRESTRIAL MAGNETIC FORCE: VERTICAL COMPONENT

Mean values for periods of sixty minutes ending at exact hours, G.M.T.

159 ESKDALEMUIR (V) — 44,000γ (0·44 C.G.S. unit) + — DECEMBER

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1	1161	1148	1153	1157	1159	1160	1159	1159	1159	1160	1155	1155	1155	1158	1155	1160	1161	1160	1161	1161	1161	1161	1161	1161	1158
2	1161	1161	1162	1161	1161	1161	1160	1159	1159	1159	1155	1156	1156	1155	1160	1171	1183	1183	1177	1171	1167	1167	1168	1167	1164
3 q	1165	1163	1164	1162	1161	1161	1160	1160	1159	1160	1155	1153	1155	1159	1159	1160	1161	1161	1161	1161	1161	1160	1160	1160	1160
4	1160	1160	1160	1160	1160	1159	1156	1154	1154	1154	1153	1150	1152	1154	1156	1155	1173	1173	1173	1169	1167	1166	1164	1160	1161
5	1156	1143	1142	1142	1126	1137	1143	1148	1155	1155	1154	1154	1155	1156	1159	1165	1165	1170	1172	1168	1168	1165	1162	1164	*1155*
6 d	1125	1123	1123	1125	1137	1148	1156	1161	1163	1165	1164	1164	1173	1183	1190	1194	1199	1213	1226	1222	1197	1184	1167	1159	*1169*
7	1160	1161	1160	1160	1161	1162	1163	1164	1168	1162	1159	1159	1161	1165	1167	1172	1183	1180	1189	1195	1187	1177	1173	1171	*1169*
8	1166	1164	1162	1162	1161	1159	1151	1152	1160	1162	1160	1160	1162	1162	1164	1166	1167	1167	1166	1167	1166	1167	1166	1166	1163
9 d	1160	1159	1158	1147	1149	1150	1148	1147	1153	1157	1160	1159	1163	1174	1178	1173	1178	1190	1197	1202	1166	1167	1172	1167	1166
10	1163	1161	1152	1148	1156	1158	1160	1160	1162	1166	1166	1161	1161	1167	1172	1174	1175	1173	1167	1162	1170	1170	1172	1171	1164
11	1167	1166	1159	1156	1149	1144	1148	1153	1160	1160	1160	1161	1165	1165	1172	1177	1177	1181	1189	1192	1191	1175	1167	1164	1167
12 d	1160	1160	1151	1146	1142	1148	1151	1154	1156	1155	1155	1159	1165	1163	1174	1180	1200	1209	1207	1198	1192	1184	1181	1174	*1169*
13 d	1168	1166	1153	1141	1144	1153	1155	1157	1155	1159	1160	1165	1167	1178	1183	1192	1192	1191	1177	1173	1173	1171	1166	1164	1167
14	1162	1160	1159	1155	1150	1152	1154	1154	1159	1166	1166	1168	1172	1176	1189	1195	1192	1186	1178	1178	1178	1173	1167	1164	*1169*
15	1159	1143	1153	1154	1153	1153	1153	1156	1160	1160	1160	1162	1165	1166	1172	1183	1181	1180	1180	1177	1175	1171	1164	1163	1164
16	1165	1166	1165	1161	1155	1158	1158	1158	1159	1160	1161	1160	1159	1159	1166	1169	1168	1167	1166	1165	1164	1162	1162	1161	1162
17 q	1162	1161	1160	1160	1160	1159	1159	1159	1159	1159	1159	1159	1159	1159	1159	1165	1167	1168	1166	1166	1166	1165	1164	1162	1162
18	1159	1156	1159	1159	1159	1159	1159	1160	1159	1154	1152	1153	1156	1159	1160	1162	1165	1165	1162	1165	1171	1165	1164	1158	1160
19	1155	1154	1154	1156	1156	1150	1155	1158	1159	1158	1155	1157	1160	1158	1165	1171	1172	1172	1173	1177	1178	1173	1168	1167	1163
20 q	1165	1165	1162	1162	1162	1161	1159	1158	1159	1157	1154	1155	1160	1156	1161	1168	1172	1172	1171	1171	1170	1168	1166	1163	1163
21 q	1161	1160	1160	1160	1160	1160	1160	1160	1160	1157	1154	1154	1154	1153	1155	1159	1160	1160	1160	1160	1160	1159	1159	1159	1159
22	1159	1159	1159	1159	1159	1159	1159	1159	1159	1155	1151	1152	1153	1154	1155	1161	1167	1171	1173	1182	1181	1172	1170	1168	1162
23 d	1162	1160	1156	1156	1156	1158	1159	1158	1158	1156	1154	1153	1150	1148	1158	1165	1171	1171	1172	1170	1168	1167	1166	1168	1161
24	1168	1167	1165	1164	1161	1161	1162	1162	1162	1160	1160	1161	1159	1155	1158	1160	1161	1162	1165	1165	1166	1167	1159	1166	1162
25	1165	1164	1162	1159	1156	1155	1156	1155	1155	1154	1153	1154	1153	1154	1156	1159	1159	1160	1161	1164	1165	1167	1167	1167	1159
26	1166	1164	1159	1158	1156	1154	1153	1154	1153	1154	1153	1156	1155	1159	1161	1162	1161	1165	1167	1167	1164	1161	1161	1163	1159
27	1165	1162	1160	1159	1159	1153	1147	1150	1153	1153	1150	1158	1156	1158	1161	1165	1164	1162	1165	1171	1170	1168	1169	1171	1160
28	1170	1166	1163	1162	1161	1160	1158	1156	1156	1152	1153	1154	1153	1153	1159	1164	1164	1162	1161	1161	1160	1159	1164	1161	1160
29	1161	1161	1161	1161	1159	1158	1158	1156	1154	1150	1154	1159	1162	1165	1173	1185	1182	1179	1172	1168	1166	1159	1149	1156	1163
30	1159	1159	1159	1159	1158	1158	1158	1158	1156	1153	1154	1154	1153	1154	1156	1159	1159	1158	1157	1159	1159	1160	1160	1159	1157
31 q	1159	1159	1158	1156	1155	1155	1155	1155	1153	1151	1151	1149	1150	1150	1151	1155	1159	1159	1160	1161	1160	1158	1156	1155	*1155*
Mean	1161	1159	1157	1156	*1155*	1157	1156	1157	1158	1157	1157	1157	1159	1161	1165	1169	1172	1173	*1173*	1173	1171	1167	1165	1164	1162

DAILY EXTREMES OF TERRESTRIAL MAGNETIC ELEMENTS, MAGNETIC CHARACTER FIGURES AND TEMPERATURE IN MAGNET HOUSE

160 ESKDALEMUIR — DECEMBER

	TERRESTRIAL MAGNETIC ELEMENTS																3-hr. range indices K	Sum of K indices	Magnetic character of day (0-2)	Temperature in magnet house 200 +
	Horizontal force					Declination					Vertical force									
	Maximum 16,000γ +		Minimum 16,000γ +		Range	Maximum 11° +		Minimum 11° +		Range	Maximum 44,000γ +		Minimum 44,000γ +		Range				
	h. m.	γ	γ	h. m.	γ	h. m.	′	′	h. m.	′	h. m.	γ	γ	h. m.	γ					°A.
1	1 4	557	482	9 32	75	10 12	58·3	49·3	1 52	9·0	0 1	1166	1144	1 43	22	3,1,2,4,1,1,0,0	12	1	83·7
2	19 57	548	511	11 41	37	12 30	62·0	49·4	22 16	12·6	16 59	1190	1153	10 51	37	1,0,1,2,2,3,3,1	13	1	83·7
3 q	22 18	547	522	12 3	25	13 30	57·5	50·7	5 59	6·8	0 1	1166	1152	11 38	14	0,1,1,1,1,0,0,1	5	0	83·7
4	7 3	568	507	16 57	61	16 42	60·9	46·8	21 12	14·1	17 2	1177	1149	11 3	28	1,0,2,1,2,3,2,3	14	1	83·7
5	4 25	576	495	23 33	81	13 49	60·8	43·1	23 21	17·7	18 10	1173	*1120*	4 23	53	3,3,2,2,2,2,2,3	19	1	83·6
6 d	21 47	566	*463*	19 2	103	14 2	64·6	*30·4*	1 23	*34·2*	18 31	*1232*	1115	2 4	*117*	4,3,2,2,3,3,4,4	25	1	83·5
7	16 47	549	487	19 45	62	17 47	61·8	43·6	16 44	18·2	19 46	1198	1158	11 30	40	2,1,2,1,1,4,3,0	14	1	83·5
8	6 33	562	510	12 33	52	6 13	61·9	50·1	9 0	11·8	17 20	1170	1144	6 34	26	1,2,3,2,2,1,1,2	14	1	83·4
9 d	3 8	565	470	13 49	96	13 40	62·8	42·8	20 29	20·0	19 38	1219	1143	7 9	76	2,3,2,3,3,3,4,3	23	1	83·4
10	21 16	558	487	10 45	71	13 5	59·8	43·9	22 31	15·9	15 49	1177	1143	2 58	34	3,2,2,3,1,2,1,3	17	1	83·3
11	5 44	561	490	19 53	71	13 46	60·1	43·9	20 24	16·2	19 55	1202	1138	5 51	64	2,2,2,2,2,2,4,3	19	1	83·2
12 d	4 30	555	466	16 46	89	12 30	63·7	44·8	0 18	18·9	17 1	1221	1137	4 40	84	3,3,2,3,3,4,3,2	23	1	83·2
13 d	2 42	568	479	13 11	89	2 42	62·0	45·8	20 39	16·2	17 10	1196	1136	3 3	60	3,3,2,2,2,3,3,2	20	1	83·2
14	5 29	555	479	11 32	76	12 14	61·8	48·0	23 34	13·8	15 20	1196	1149	5 22	47	2,2,2,2,3,3,2,2	18	1	83·2
15	1 10	553	492	14 47	61	0 49	58·7	45·0	0 18	13·7	15 28	1184	1136	1 10	48	4,1,1,2,3,2,2,3	18	1	83·2
16	4 28	558	508	11 13	50	13 50	61·8	50·8	9 47	11·0	16 5	1170	1153	4 36	17	0,2,1,2,1,1,0,0	7	0	83·2
17 q	3 50	552	524	10 52	28	13 58	59·0	47·5	24 0	11·5	16 41	1171	1156	6 12	15	1,1,1,1,1,1,1,2	9	0	83·1
18	0 46	557	520	20 0	37	12 8	58·3	43·8	23 42	14·5	20 30	1171	1153	11 22	18	2,1,1,1,1,0,2,3	11	0	83·1
19	5 31	562	513	11 52	49	13 49	60·2	46·1	0 1	14·1	20 3	1179	1149	5 32	30	3,2,1,2,1,1,2,2	14	1	83·1
20 q	6 1	544	517	17 2	27	14 18	59·4	51·2	23 13	8·2	17 0	1173	1152	10 30	21	0,1,1,0,1,2,2,1	8	0	82·9
21 q	20 47	552	527	10 40	25	14 9	56·5	51·8	9 6	4·7	0 1	1163	1151	13 29	12	0,0,0,1,1,1,0,0	3	0	82·9
22	4 45	555	495	19 37	60	16 19	60·3	42·0	23 28	18·3	19 39	1186	1149	10 43	37	1,0,0,0,2,2,3,3	11	1	82·7
23 d	14 9	569	499	1 20	70	14 6	*65·6*	44·5	1 22	21·1	17 40	1173	1147	13 20	26	3,1,2,2,3,2,1,2	16	1	82·7
24	21 56	*608*	519	22 47	89	14 38	56·5	41·3	21 49	15·2	21 39	1171	1153	22 15	18	1,1,1,1,1,1,1,4	11	1	82·6
25	19 2	559	528	0 31	31	13 19	58·3	50·9	0 56	7·4	22 51	1169	1151	12 37	18	1,1,0,1,1,1,2,2	9	0	82·6
26	6 0	588	526	14 59	62	13 19	60·2	46·0	24 0	14·2	19 18	1168	1150	10 22	18	3,2,2,2,2,2,2,2	17	1	82·6
27	5 44	573	484	23 18	89	14 10	58·0	43·0	23 40	15·0	23 57	1173	1145	6 1	28	2,3,2,2,1,2,2,4	18	1	82·6
28	22 58	568	513	0 1	55	14 9	59·2	40·1	22 50	19·1	0 2	1172	1152	13 20	20	3,2,1,1,2,2,0,4	15	1	82·5
29	21 48	588	475	15 17	*113*	15 0	62·7	43·0	21 10	19·7	15 21	1188	1148	22 21	40	1,2,1,1,3,3,2,3	16	1	82·5
30	14 42	560	525	10 22	35	13 6	57·9	50·9	0 1	7·0	19 30	1161	1152	12 21	*9*	1,1,1,1,2,1,1,1	9	0	82·5
31 q	7 0	550	534	11 17	*16*	12 39	56·4	52·0	23 58	*4·4*	19 32	1162	1148	11 29	14	0,1,0,0,1,0,1,0	3	0	82·5
Mean	— —	562	502	— —	61	— —	60·2	45·9	— —	14·3	— —	1181	1146	— —	35	-	-	0·71	83·1

q denotes an international quiet day and d an international disturbed day.

DIURNAL INEQUALITIES OF THE GEOGRAPHICAL COMPONENTS OF MAGNETIC FORCE

ALL DAYS

Departures from the mean of the 24 hourly values (uncorrected for non-cyclic change)

161 ESKDALEMUIR

NORTH COMPONENT

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
Jan.	+3·6	+5·1	+3·7	+6·8	+7·2	+8·1	*+10·3*	+6·4	+2·2	-6·9	-15·9	*-19·1*	-16·4	-9·2	-6·6	-1·8	+0·4	+1·7	+2·4	+2·0	+4·2	+4·0	+4·3	+3·4
Feb.	+4·8	+9·2	+7·7	+9·3	+11·2	+15·5	*+16·5*	+15·3	+7·0	-6·7	-20·9	-30·5	*-32·5*	-25·2	-14·9	-7·3	-1·5	+3·2	+4·2	+6·1	+8·5	+7·2	+8·9	+4·9
Mar.	+1·8	+3·1	+6·5	+7·6	+12·3	+19·3	+14·7	+6·9	-8·3	-24·1	-30·9	*-33·0*	-30·9	-22·7	-6·4	+7·0	*+20·8*	+14·3	*+20·8*	+16·7	+8·1	+5·8	+0·6	-10·1
Apr.	+11·4	+8·7	+8·1	+8·8	+9·9	+11·7	+13·0	+6·2	-3·1	-25·1	-41·9	*-48·3*	-40·7	-30·7	-17·4	+2·4	+7·8	+17·5	+23·9	*+24·6*	+15·3	+16·3	+7·1	+14·5
May	+8·8	+6·1	+6·5	+5·3	+7·1	+8·3	+1·9	-7·0	-21·7	-31·6	-41·3	*-43·8*	-40·1	-28·6	-13·1	+4·7	+17·3	+30·6	*+31·6*	+30·2	+24·8	+18·4	+13·5	+12·2
June	+4·5	+4·6	+4·7	+4·1	+5·9	+5·8	-2·0	-11·3	-23·7	-35·5	-41·1	*-41·7*	-33·3	-23·3	-10·5	+1·9	+11·7	+32·4	*+35·5*	+33·7	+28·3	+22·5	+15·8	+10·9
July	+5·2	+3·2	+2·9	+3·9	+8·3	+9·6	+0·4	-9·9	-19·5	-33·8	-42·8	*-47·2*	-40·7	-25·4	-11·4	+7·0	+20·0	+29·3	*+42·1*	+35·4	+32·4	+17·7	+8·0	+5·5
Aug.	+3·4	+8·1	+11·3	+10·5	+12·3	+8·3	+2·8	-5·1	-21·1	-44·2	*-48·5*	-45·8	-37·8	-26·4	-5·6	+8·0	+15·9	+23·3	*+30·8*	+30·3	+28·5	+20·7	+10·3	+10·0
Sept.	+6·7	+5·7	+8·7	+10·8	+13·8	+11·2	+2·2	-7·8	-20·3	-34·4	-46·1	*-46·4*	-36·1	-24·1	-4·3	+15·2	+30·1	*+31·1*	+30·3	+24·3	+18·4	+6·2	+6·1	-1·3
Oct.	+5·6	+8·1	+10·8	+14·3	+14·6	*+14·8*	+10·4	+6·8	-5·3	-25·0	-37·3	*-42·2*	-36·7	-27·7	-13·7	+4·8	+12·1	+13·6	+12·5	+12·7	+10·1	+14·2	+13·3	+9·1
Nov.	+2·1	+1·8	+7·3	+9·3	+10·3	*+11·0*	+9·8	+6·6	+1·4	-7·6	-15·2	-19·6	*-20·0*	-13·9	-9·6	-7·1	-0·6	+2·1	+5·8	+6·3	+6·8	+6·1	+2·5	+4·5
Dec.	+2·3	+3·8	+4·5	+5·4	+9·5	*+11·3*	+10·5	+8·5	+5·5	-2·8	-9·5	-12·6	*-13·7*	-11·9	-12·3	-9·4	-5·9	-2·4	-1·1	0·0	+3·2	+7·7	+6·1	+3·2
Year	+5·1	+5·7	+6·9	+8·0	+10·2	+11·2	+7·5	+1·3	-8·9	-23·1	-32·6	*-35·9*	-31·6	-22·4	-10·5	+2·1	+10·7	+16·3	*+19·9*	+18·5	+15·7	+12·2	+8·1	+5·6
Winter	+3·2	+5·0	+5·8	+7·7	+9·5	+11·5	*+11·8*	+9·2	+4·0	-6·0	-15·4	-20·4	*-20·7*	-15·0	-10·8	-6·3	-1·8	+1·2	+2·8	+3·6	+5·6	+6·3	+5·5	+4·1
Equinox	+6·4	+6·4	+8·5	+10·4	+12·7	+14·3	+10·1	+3·0	-9·3	-27·1	-39·0	*-42·5*	-36·0	-26·3	-10·4	+7·4	+17·8	+19·1	*+21·9*	+19·6	+12·9	+10·6	+6·7	+3·0
Summer	+5·4	+5·5	+6·3	+6·0	+8·4	+8·0	+0·8	-8·3	-21·4	-36·2	-43·4	*-44·6*	-38·0	-25·9	-10·1	+5·3	+16·3	+28·9	*+35·0*	+32·4	+28·5	+19·8	+12·1	+9·6

WEST COMPONENT

	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
Jan.	-7·8	-8·5	-5·7	-2·9	-3·9	-1·7	-1·7	-3·1	-6·4	-7·2	-4·5	+2·1	+10·5	*+16·1*	+14·6	+14·2	+10·6	+10·1	+6·5	-0·2	-4·0	-6·3	*-10·4*	*-10·4*
Feb.	-9·1	-11·7	-13·1	-5·9	-4·5	-4·4	-4·4	-7·0	-13·7	*-18·4*	-11·8	+0·8	+14·4	+23·2	*+27·2*	+22·2	+16·2	+10·4	+9·0	+6·6	-0·3	-7·0	-10·6	-8·1
Mar.	-13·2	-19·3	-22·0	-13·7	-8·9	-4·3	-3·3	-10·8	*-24·0*	-18·9	-11·0	+9·8	+27·7	+34·9	*+37·7*	+33·0	+24·6	+11·8	+5·9	+2·8	-4·3	-6·5	-10·0	-17·7
Apr.	-9·2	-10·4	-8·5	-8·8	-8·8	-10·9	-16·3	-25·3	*-32·7*	-29·3	-16·1	+3·2	+26·1	+36·9	*+37·9*	+32·9	+21·1	+14·1	+9·8	+7·7	+2·0	+0·2	-7·4	-8·3
May	-3·3	-4·8	-4·0	-11·1	-19·3	-26·5	-34·0	*-39·5*	-38·5	-21·9	-6·3	+13·3	+29·6	*+36·7*	+34·7	+26·6	+19·5	+13·0	+7·6	+7·9	+6·2	+6·5	+4·5	+3·3
June	-4·2	-6·9	-11·5	-13·3	-23·3	-29·6	-35·5	*-40·4*	-37·3	-26·2	-9·2	+9·9	+26·9	+35·1	*+37·0*	+32·9	+25·2	+22·7	+14·4	+11·7	+11·4	+8·4	+4·3	-2·6
July	-6·7	-6·9	-10·7	-10·4	-17·6	-29·1	-34·1	-36·8	*-37·0*	-30·9	-17·8	+1·9	+22·3	+34·6	*+37·7*	+36·0	+28·1	+21·1	+17·1	+14·4	+13·7	+8·1	+3·2	-0·4
Aug.	-8·7	-10·0	-15·7	-15·9	-14·6	-22·4	-28·3	-31·4	*-31·9*	-29·9	-15·3	+10·9	+30·5	+41·5	*+43·1*	+34·9	+23·4	+16·0	+9·8	+8·9	+7·4	+2·4	0·0	-4·6
Sept.	-20·6	-19·2	-20·1	-15·0	-9·3	-7·6	-15·8	-26·9	*-28·1*	-18·0	-1·2	+16·5	+35·0	*+40·3*	+39·4	+36·1	+24·0	+14·6	+9·2	+2·5	-5·2	-6·3	-13·0	-11·5
Oct.	-18·1	-15·7	-13·6	-12·3	-6·4	-1·4	-0·7	-9·8	-18·6	*-18·7*	-4·5	+11·4	+26·7	*+33·8*	+32·5	+21·3	+20·0	+14·5	+6·4	+4·1	-5·2	-11·6	-16·3	-17·8
Nov.	-10·9	-11·6	-7·1	-6·0	-5·1	-3·5	-3·3	-4·8	-8·4	-11·0	-3·2	+7·9	+15·5	*+22·0*	+20·5	+17·7	+12·2	+7·5	+6·9	+2·9	-1·7	-9·3	*-14·0*	-13·2
Dec.	-12·5	-10·1	-6·4	-2·8	-2·3	-0·8	+1·4	0·0	-2·6	-4·4	-0·6	+6·3	+13·1	*+16·8*	+16·3	+13·7	+9·5	+7·5	+4·1	-0·4	-5·4	-10·8	-13·4	*-16·3*
Year	-10·3	-11·2	-11·6	-9·7	-10·3	-11·8	-14·7	-19·6	*-23·2*	-19·5	-8·5	+7·8	+23·2	+31·0	*+31·5*	+26·8	+19·5	+13·6	+8·8	+5·7	+1·2	-2·7	-6·9	-9·0
Winter	-10·0	-10·4	-8·1	-4·4	-3·9	-2·6	-2·0	-3·7	-7·7	-10·3	-5·0	+4·3	+13·3	+19·5	*+19·7*	+16·9	+12·1	+8·9	+6·6	+2·2	-2·8	-8·3	*-12·1*	-12·0
Equinox	-15·3	-16·2	-16·0	-12·5	-8·4	-6·1	-9·0	-18·2	*-25·8*	-21·2	-8·2	+10·2	+28·9	+36·5	*+36·9*	+30·8	+22·4	+13·8	+7·8	+4·3	-3·2	-6·1	-11·7	-13·9
Summer	-5·7	-7·1	-10·5	-12·7	-18·7	-26·9	-33·0	*-37·0*	-36·2	-27·2	-12·2	+9·0	+27·3	+37·0	*+38·2*	+32·6	+24·1	+18·2	+12·2	+10·7	+9·7	+6·3	+3·1	-1·1

VERTICAL COMPONENT

	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
Jan.	-1·3	-3·5	-4·0	-6·3	*-11·1*	-8·2	-9·5	-7·9	-5·2	-4·1	-3·7	-2·9	-2·4	+0·3	+3·7	+7·5	+8·0	+8·6	*+11·3*	+11·0	+8·8	+5·5	+3·9	+1·5
Feb.	-6·4	-5·7	-8·3	*-10·6*	-8·9	-8·4	-6·6	-4·8	-1·4	-2·6	-5·1	-6·4	-5·6	-1·7	+5·0	+10·4	+13·4	*+14·5*	+12·0	+10·0	+9·3	+5·9	+3·2	-1·2
Mar.	-22·9	-27·7	-27·2	*-30·7*	-26·1	-25·0	-18·7	-11·9	-7·5	-5·7	-5·4	-5·5	-1·2	+8·0	+20·3	+31·3	*+41·7*	+40·3	+35·6	+29·3	+18·4	+6·7	-4·2	-11·9
Apr.	-5·5	-3·9	-4·4	-4·3	-3·9	-5·5	-5·1	-2·8	-3·2	-6·7	-11·1	-13·6	*-14·0*	-7·6	-0·1	+7·7	+16·2	+18·9	*+20·9*	+18·1	+10·2	+7·2	-4·8	-2·7
May	-1·6	-3·5	-6·6	-7·6	-4·7	-0·9	+0·3	-1·1	-5·0	-13·3	-20·2	*-22·7*	-18·2	-8·3	+2·5	+11·3	+14·5	+21·3	*+21·5*	+18·5	+15·2	+7·4	+2·4	-1·2
June	-10·4	-12·3	-11·9	*-15·7*	-14·2	-9·8	-8·1	-7·9	-8·3	-10·2	-13·4	-14·3	-8·6	-1·3	+5·8	+13·3	+20·7	+25·4	*+26·9*	+22·1	+16·6	+11·0	+5·2	-0·6
July	-6·4	-9·2	-8·5	-9·0	-7·3	-2·6	-2·0	-3·2	-6·0	-11·2	-14·3	*-16·8*	*-16·8*	-10·1	-0·7	+7·5	+17·6	+22·5	*+23·1*	+20·4	+17·9	+11·9	+2·9	+0·3
Aug.	-14·1	*-24·3*	-20·8	-18·7	-15·2	-12·5	-9·5	-8·4	-7·9	-9·8	-11·8	-13·3	-10·7	-0·6	+13·2	+26·6	+35·6	*+36·7*	+30·3	+22·3	+15·6	+7·1	-2·4	-7·4
Sept.	*-28·4*	-26·2	-26·9	-24·5	-23·4	-21·7	-16·6	-7·9	-6·6	-7·5	-8·1	-5·4	-0·6	+8·0	+18·4	+31·5	+43·0	*+48·0*	+40·1	+27·0	+13·6	+3·2	-7·9	-21·1
Oct.	-18·2	-22·2	*-22·4*	-18·5	-19·6	-17·9	-13·2	-6·8	-2·3	-2·4	-5·4	-4·8	-0·1	+6·7	+15·0	+25·6	+28·6	*+29·2*	+27·7	+20·1	+14·1	+6·1	-5·2	-14·1
Nov.	-8·9	*-11·6*	-9·0	-8·3	-7·4	-7·4	-6·5	-5·1	-3·2	-3·6	-5·4	-4·4	-1·5	+2·8	+10·1	+13·2	*+14·7*	+14·2	+12·1	+11·2	+10·0	+3·7	-2·6	-7·1
Dec.	-1·2	-3·7	-5·2	-6·6	*-7·5*	-6·8	-6·4	-5·8	-4·5	-4·8	-5·9	-5·1	-3·7	-1·8	+2·2	+7·1	+9·9	+10·8	*+10·9*	*+10·9*	+8·1	+5·0	+2·7	+1·4
Year	-10·4	-12·8	-12·9	*-13·4*	-12·4	-10·6	-8·5	-6·1	-5·1	-6·8	-9·1	-9·6	-6·9	-0·5	+7·9	+16·1	+22·0	*+24·2*	+22·7	+18·4	+13·1	+6·7	-0·6	-5·3
Winter	-4·5	-6·1	-6·6	-7·9	*-8·7*	-7·7	-7·3	-5·9	-3·6	-3·8	-5·0	-4·7	-3·3	-0·1	+5·3	+9·5	+11·5	*+12·0*	+11·6	+10·8	+9·1	+5·0	+1·8	-1·3
Equinox	-18·7	-20·0	*-20·2*	-19·5	-18·3	-17·5	-13·4	-7·3	-4·9	-5·6	-7·5	-7·3	-4·0	+3·8	+13·4	+24·0	*+32·4*	+34·1	+31·1	+23·6	+14·1	+5·8	-5·5	-12·5
Summer	-8·1	-12·3	-11·9	-12·7	-10·3	-6·5	-4·8	-5·1	-6·8	-11·1	-14·9	*-16·8*	-13·6	-5·1	+5·2	+14·7	+22·1	*+26·5*	+25·5	+20·8	+16·3	+9·3	+2·0	-2·2

ALL DAYS

Departures from the mean of the 24 hourly values (uncorrected for non-cyclic change)

162 ESKDALEMUIR

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24
DECLINATION (measured positive towards the west)																								
	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′
Jan.	-1·74	-1·95	-1·32	-0·89	-1·10	-0·69	-0·79	-0·91	-1·40	-1·16	-0·22	+1·25	+2·85	*+3·68*	+3·25	+2·96	+2·14	+1·97	+1·21	-0·13	-0·99	-1·45	*-2·30*	-2·27
Feb.	-2·05	-2·77	-3·01	-1·61	-1·41	-1·56	-1·60	-2·08	-3·09	*-3·46*	-1·50	+1·49	+4·34	+5·82	*+6·18*	+4·83	+3·36	+1·97	+1·64	+1·08	-0·43	-1·73	-2·54	-1·87
Mar.	-2·76	-4·07	*-4·76*	-3·13	-2·35	-1·71	-1·32	-2·50	-4·52	-2·81	-0·91	+3·43	+6·97	*+8·08*	+7·96	+6·41	+4·10	+1·79	+0·29	-0·16	-1·22	-1·58	-2·06	-3·17
Apr.	-2·36	-2·50	-2·09	-2·17	-2·22	-2·73	-3·87	-5·41	*-6·53*	-4·88	-1·46	+2·75	+7·07	*+8·84*	+8·47	+6·60	+3·96	+2·11	+0·97	+0·50	-0·25	-0·67	-1·81	-2·32
May	-1·06	-1·23	-1·10	-2·48	-4·22	-5·75	-7·00	*-7·73*	-6·89	-3·08	+0·50	+4·59	+7·73	*+8·69*	+7·62	+5·21	+3·21	+1·32	+0·18	+0·30	+0·20	+0·52	+0·33	+0·14
June	-1·05	-1·60	-2·54	-2·88	-4·99	-6·26	-7·12	*-7·72*	-6·55	-3·79	-0·11	+3·80	+6·89	*+8·13*	+7·97	+6·60	+4·62	+3·22	+1·41	+0·92	+1·10	+0·74	+0·20	-0·99
July	-1·58	-1·54	-2·29	-2·29	-3·93	-6·33	-6·95	*-7·05*	-6·67	-4·82	-1·78	+2·42	+6·28	+8·13	*+8·15*	+7·02	+4·86	+3·02	+1·66	+1·41	+1·40	+0·89	+0·30	-0·31
Aug.	-1·92	-2·39	-3·69	-3·69	-3·50	-4·91	-5·89	*-6·18*	-5·59	-4·19	-1·03	+4·20	+7·83	*+9·58*	+9·03	+6·77	+4·09	+2·25	+0·66	+0·51	+0·27	-0·40	-0·44	-1·37
Sept.	-4·49	-4·15	-4·46	-3·52	-2·48	-2·03	-3·31	*-5·15*	-4·84	-2·19	+1·74	+5·37	+8·69	*+9·24*	+8·22	+6·70	+3·59	+1·64	+0·56	-0·54	-1·86	-1·54	-2·91	-2·28
Oct.	-3·92	-3·55	-3·23	-3·13	-1·93	-0·92	-0·59	-2·29	-3·56	-2·74	+0·69	+4·13	+7·02	*+8·07*	+7·20	+4·14	+3·56	+2·37	+0·76	+0·28	-1·49	-2·97	-3·89	*-4·01*
Nov.	-2·30	-2·44	*-1·76*	-1·63	-1·47	-1·19	-1·08	*-1·26*	-1·77	-1·91	0·00	+2·45	+4·01	*+5·08*	+4·59	+3·90	+2·52	+1·43	+1·16	+0·32	-0·64	-2·16	*-2·97*	-2·88
Dec.	-2·64	-2·21	-1·49	-0·80	-0·87	-0·64	-0·17	-0·37	-0·76	-0·77	+0·28	+1·82	+3·25	*+3·93*	+3·84	+3·20	+2·18	+1·62	+0·89	-0·09	-1·23	-2·53	-2·99	*-3·45*
Year	-2·32	-2·53	-2·65	-2·33	-2·54	-2·89	-3·31	-4·05	*-4·35*	-2·98	-0·32	+3·14	+6·08	*+7·27*	+6·87	+5·36	+3·52	+2·06	+0·94	+0·37	-0·43	-1·07	-1·76	-2·07
Winter	-2·18	-2·34	-1·89	-1·23	-1·21	-1·02	-0·91	-1·13	-1·75	-1·83	-0·36	+1·75	+3·61	*+4·63*	+4·47	+3·72	+2·55	+1·75	+1·23	+0·29	-0·82	-1·97	*-2·70*	-2·62
Equinox	-3·38	-3·57	-3·63	-2·99	-2·25	-1·85	-2·27	-3·84	*-4·86*	-3·15	+0·01	+3·92	+7·44	*+8·56*	+7·96	+5·96	+3·80	+1·98	+0·65	+0·02	-1·21	-1·69	-2·67	-2·95
Summer	-1·40	-1·69	-2·41	-2·83	-4·16	-5·81	-6·74	*-7·17*	-6·43	-3·97	-0·61	+3·75	+7·18	*+8·63*	+8·19	+6·40	+4·19	+2·45	+0·98	+0·79	+0·74	+0·44	+0·10	-0·63
INCLINATION																								
	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′
Jan.	-0·16	-0·30	-0·26	-0·56	-0·69	-0·71	*-0·89*	-0·57	-0·18	+0·45	+1·02	*+1·15*	+0·88	+0·38	+0·32	+0·11	+0·02	-0·04	+0·03	+0·15	0·00	-0·04	-0·04	-0·04
Feb.	-0·35	-0·59	-0·53	-0·79	-0·89	-1·17	*-1·19*	-1·03	-0·31	+0·64	+1·42	*+1·84*	+1·80	+1·29	+0·72	+0·43	+0·20	0·00	-0·11	-0·24	-0·32	-0·23	-0·36	-0·24
Mar.	-0·50	-0·62	-0·80	-1·07	-1·33	*-1·83*	-1·39	-0·60	+0·70	+1·71	*+2·06*	+1·90	+1·62	+1·20	+0·39	-0·15	-0·69	-0·11	-0·57	-0·41	-0·02	-0·12	0·00	+0·62
Apr.	-0·76	-0·52	-0·52	-0·57	-0·62	-0·76	-0·75	-0·12	+0·58	+1·90	+2·71	*+2·80*	+1·97	+1·31	+0·61	-0·43	-0·41	-0·88	-1·19	*-1·28*	-0·79	-0·90	-0·48	-0·91
May	-0·57	-0·42	-0·53	-0·38	-0·32	-0·20	+0·36	+0·99	+1·84	+2·06	*+2·31*	+2·14	+1·78	+1·17	+0·44	-0·40	-1·05	*-1·67*	-1·66	-1·64	-1·35	-1·12	-0·89	-0·88
June	-0·49	-0·51	-0·44	-0·47	-0·41	-0·21	+0·43	+1·11	+1·88	+2·46	*+2·51*	+2·25	+1·61	+1·01	+0·32	-0·26	-0·61	-1·82	*-1·87*	-1·84	-1·62	-1·33	-0·98	-0·70
July	-0·41	-0·34	-0·25	-0·34	-0·48	-0·29	+0·40	+1·09	+1·66	+2·38	*+2·72*	+2·67	+1·95	+0·94	+0·21	-0·78	-1·28	-1·67	*-2·44*	-2·03	-1·89	-0·99	-0·50	-0·35
Aug.	-0·45	-1·00	-1·04	-0·94	-0·98	-0·55	-0·03	+0·57	+1·64	+3·09	*+3·12*	+2·54	+1·80	+1·15	+0·10	-0·35	-0·49	-0·85	-1·42	-1·57	*-1·59*	-1·23	-0·74	-0·78
Sept.	-0·86	-0·76	-0·96	-1·11	*-1·36*	-1·17	-0·34	+0·69	+1·56	+2·33	*+2·86*	+2·70	+1·88	+1·23	+0·19	-0·72	-1·25	-1·06	-1·14	-0·97	-0·80	-0·25	-0·42	-0·28
Oct.	-0·57	-0·87	-1·08	-1·23	-1·36	*-1·40*	-1·00	-0·48	+0·55	+1·85	+2·39	*+2·51*	+2·05	+1·53	+0·82	+0·02	-0·37	-0·37	-0·23	-0·40	-0·24	-0·62	-0·78	-0·70
Nov.	-0·21	-0·25	-0·61	-0·74	-0·79	*-0·86*	-0·76	-0·50	-0·05	+0·57	+0·91	*+1·08*	+1·07	+0·68	+0·60	+0·55	+0·24	+0·11	-0·18	-0·18	-0·18	-0·18	-0·04	-0·29
Dec.	-0·01	-0·20	-0·33	-0·48	-0·78	*-0·90*	-0·87	-0·70	-0·44	+0·12	+0·49	+0·61	+0·63	+0·51	*+0·64*	+0·61	+0·50	+0·32	+0·28	+0·28	+0·07	-0·23	-0·15	+0·05
Year	-0·45	-0·53	-0·61	-0·72	-0·83	-0·84	-0·50	+0·04	+0·78	+1·63	*+2·05*	+2·02	+1·59	+1·03	+0·45	-0·11	-0·43	-0·67	*-0·87*	-0·85	-0·73	-0·60	-0·45	-0·37
Winter	-0·19	-0·33	-0·43	-0·64	-0·79	-0·91	*-0·93*	-0·70	-0·24	+0·45	+0·96	*+1·17*	+1·10	+0·72	+0·57	+0·42	+0·24	+0·10	+0·01	0·00	-0·10	-0·17	-0·15	-0·13
Equinox	-0·67	-0·69	-0·84	-1·00	-1·17	*-1·29*	-0·87	-0·13	+0·85	+1·94	*+2·50*	+2·48	+1·88	+1·32	+0·51	-0·32	-0·68	-0·60	-0·79	-0·77	-0·46	-0·47	-0·42	-0·32
Summer	-0·48	-0·57	-0·57	-0·53	-0·55	-0·31	+0·29	+0·94	+1·75	+2·49	*+2·66*	+2·40	+1·79	+1·07	+0·26	-0·44	-0·86	-1·50	*-1·85*	-1·77	-1·61	-1·16	-0·79	-0·67
HORIZONTAL FORCE																								
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
Jan.	+1·9	+3·2	+2·4	+6·0	+6·2	+7·6	+9·7	+5·6	+0·8	-8·2	-16·5	*-18·2*	-13·9	-5·6	-3·4	+1·2	+2·6	+3·8	+3·7	+1·9	+3·3	+2·6	+2·1	+1·2
Feb.	+2·8	+6·6	+4·8	+7·9	+10·0	+14·3	*+15·2*	+13·5	+4·0	-10·4	-22·9	*-29·7*	-28·8	-19·8	-8·9	-2·5	+1·9	+5·3	+6·0	+7·3	+8·2	+5·6	+6·5	+3·1
Mar.	-1·0	-1·0	+1·8	+4·6	+10·2	+18·0	+13·7	+4·5	-13·1	-27·5	*-32·5*	-30·2	-24·5	-14·9	+1·6	+13·7	*+25·5*	+16·4	+21·6	+16·9	+7·0	+4·3	-1·5	-13·6
Apr.	+9·2	+6·3	+6·1	+6·8	+7·8	+9·2	+9·3	+0·8	-9·8	-30·6	-44·3	*-46·6*	-34·4	-22·3	-9·1	+9·2	+12·0	+20·0	+25·4	*+25·7*	+15·4	+16·0	+5·4	+12·5
May	+7·9	+5·0	+5·5	+2·9	+3·0	+2·6	-5·2	-15·1	-29·2	-35·5	*-41·7*	-40·1	-33·1	-20·4	-5·6	+10·1	+21·0	*+32·6*	+32·5	+31·2	+25·6	+19·3	+14·1	+12·6
June	+3·5	+3·1	+2·2	+1·2	+0·9	-0·5	-9·3	-19·4	-30·9	-40·2	*-42·1*	-38·7	-27·0	-15·5	-2·6	+8·7	+16·7	+36·4	*+37·7*	+35·4	+30·1	+23·8	+16·4	+10·1
July	+3·7	+1·7	+0·6	+1·7	+4·5	+3·3	-6·7	-17·3	-26·8	-39·5	-45·6	*-45·8*	-35·2	-17·7	-3·3	+14·3	+25·4	+33·0	*+44·7*	+37·6	+34·6	+19·0	+8·5	+5·3
Aug.	+1·5	+5·9	+7·8	+7·0	+9·0	+3·5	-3·1	-11·5	-27·2	-49·4	*-50·6*	-42·6	-30·7	-17·3	+3·4	+15·0	+20·4	+26·1	*+32·2*	+31·5	+29·4	+20·8	+10·1	+8·8
Sept.	+2·3	+1·6	+4·4	+7·5	+11·6	+9·4	-1·1	-13·2	-25·6	-37·4	*-45·4*	-42·0	-28·1	-15·3	+3·9	+22·3	*+34·4*	+33·4	+31·6	+24·3	+16·9	+4·8	+3·3	-3·6
Oct.	+1·8	+4·7	+7·8	+11·5	+13·0	+14·2	+10·0	+4·6	-9·0	-28·3	-37·5	*-39·0*	-30·4	-20·2	-6·7	+9·1	+16·0	*+16·3*	+13·6	+13·3	+8·8	+11·5	+9·7	+5·2
Nov.	-0·2	-0·6	+5·7	+7·9	+9·0	*+10·0*	+8·9	+5·5	-0·4	-9·7	-15·5	*-17·6*	-16·4	-9·1	-5·2	-3·3	+1·9	+3·6	+7·1	+6·8	+6·3	+4·0	-0·4	+1·7
Dec.	-0·3	+1·6	+3·1	+4·7	+8·8	*+10·9*	+10·6	+8·3	+4·9	-3·6	-9·4	*-11·0*	-10·7	-8·2	-8·7	-6·4	-3·8	-0·8	-0·2	-0·1	+2·0	+5·3	+3·2	-0·2
Year	+2·8	+3·2	+4·3	+5·8	+7·8	+8·5	+4·3	-2·8	-13·5	-26·7	*-33·7*	-33·5	-26·1	-15·5	-3·7	+7·6	+14·5	+18·8	*+21·3*	+19·3	+15·6	+11·4	+6·5	+3·6
Winter	+1·1	+2·7	+4·0	+6·6	+8·5	+10·7	*+11·1*	+8·2	+2·3	-8·0	-16·1	*-19·1*	-17·5	-10·7	-6·5	-2·7	+0·7	+3·0	+4·1	+4·0	+4·9	+4·4	+2·9	+1·5
Equinox	+3·1	+2·9	+5·0	+7·6	+10·7	+12·7	+8·0	-0·8	-14·4	-30·9	*-39·9*	-39·5	-29·3	-18·2	-2·6	+13·6	+22·0	+21·5	*+23·1*	+20·1	+12·0	+9·1	+4·2	+0·1
Summer	+4·1	+3·9	+4·0	+3·2	+4·3	+2·2	-6·1	-15·8	-28·5	-41·1	*-45·0*	-41·8	-31·5	-17·7	-2·0	+12·0	+20·9	+32·0	*+36·8*	+33·9	+29·9	+20·7	+12·5	+9·2

DIURNAL INEQUALITIES OF THE GEOGRAPHICAL COMPONENTS OF MAGNETIC FORCE

INTERNATIONAL QUIET DAYS

Departures from the mean of the 24 hourly values (uncorrected for non-cyclic change)

163 ESKDALEMUIR

NORTH COMPONENT

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
Jan.	+0·7	+1·1	+1·0	+1·7	+3·6	+5·5	*+7·1*	+7·0	+3·5	-3·7	-11·5	-13·4	*-13·6*	-9·7	-5·5	-1·5	+0·9	+3·8	+5·0	+5·4	+6·0	+4·0	+1·4	+1·1
Feb.	+5·2	+7·0	+8·2	+9·6	+9·9	+11·8	*+12·3*	+11·0	+5·3	-7·9	-22·3	*-31·5*	-31·1	-21·0	-10·3	-5·5	-1·7	+2·0	+4·8	+7·6	+9·0	+9·3	+9·4	+8·7
Mar.	+8·7	+8·2	+6·5	+9·8	+11·2	+14·0	+12·9	+11·7	-0·7	-18·0	-30·2	*-35·8*	-33·3	-24·5	-16·2	-9·5	-1·2	+1·7	+9·2	+13·6	+17·5	*+17·7*	+15·4	+11·4
Apr.	+11·0	+9·5	+8·2	+8·2	+9·0	+11·9	+10·2	+4·7	-5·1	-23·0	-38·0	*-45·4*	-42·5	-32·1	-16·3	-4·6	+6·8	+14·8	+17·5	+19·5	+19·5	*+19·7*	+17·9	+18·7
May	+7·5	+5·6	+4·9	+6·1	+10·2	+11·6	+5·0	-3·5	-14·1	-27·5	-35·3	*-39·8*	-32·5	-24·5	-12·3	+1·1	+11·6	+19·1	*+21·6*	+20·9	+20·5	+17·8	+13·6	+12·5
June	+4·4	+7·3	+7·9	+8·8	+10·1	+5·6	-1·5	-7·5	-13·4	-26·1	-35·0	*-38·7*	-36·7	-26·9	-13·8	-4·0	+4·4	+17·9	*+28·6*	*+28·6*	+23·1	+20·8	+20·2	+15·9
July	+6·0	+6·2	+5·3	+8·9	+13·0	+8·9	-3·9	-15·0	-22·8	-29·3	-34·9	*-38·3*	-33·6	-20·8	-8·8	+8·0	+15·5	+20·2	+25·3	*+27·1*	+23·5	+16·8	+13·0	+9·7
Aug.	+17·6	+18·5	+12·1	+15·7	+17·6	+13·5	+7·3	-0·2	-15·2	-31·1	-45·1	*-48·7*	-44·4	-34·5	-19·4	-6·3	+6·1	+14·4	+18·1	+21·1	+23·1	*+24·2*	+18·7	+17·0
Sept.	+12·5	+13·2	+14·1	+11·5	+11·2	+8·3	+4·7	-3·2	-15·9	-29·6	-38·9	*-41·3*	-40·4	-29·5	-16·4	-5·0	+8·3	+17·8	+23·2	*+25·9*	+21·6	+18·1	+15·1	+14·6
Oct.	+8·9	+7·5	+8·5	+8·9	+9·9	+11·4	+8·1	+4·7	-5·4	-23·6	-31·5	*-33·5*	-26·3	-17·1	-6·6	-3·3	+3·6	+5·5	+7·9	+11·1	+11·9	*+13·7*	+13·3	+12·6
Nov.	+3·0	+4·0	+3·9	+5·1	+4·4	+4·5	+3·8	+1·6	-1·7	-9·9	-15·4	*-20·2*	-17·4	-11·0	-6·5	-3·1	+1·0	+4·5	+7·6	+6·6	+7·8	+7·1	+7·6	*+12·6*
Dec.	+1·6	+2·2	+1·5	+3·4	+4·5	+5·6	*+6·6*	+4·4	+4·0	-2·6	-7·8	*-9·1*	-8·7	*-9·1*	-8·3	-7·8	-4·8	-0·9	+2·1	+3·6	+5·3	+4·2	+5·2	+4·8
Year	+7·2	+7·5	+6·8	+8·1	+9·6	+9·4	+6·0	+1·3	-6·8	-19·3	-28·9	*-33·0*	-30·0	-21·7	-11·8	-3·5	+4·2	+10·1	+14·2	*+15·9*	+15·7	+14·5	+12·6	+11·7
Winter	+2·7	+3·6	+3·7	+5·0	+5·6	+6·8	*+7·5*	+6·1	+2·8	-6·1	-14·2	*-18·5*	-17·7	-12·7	-7·6	-4·5	-1·2	+2·4	+4·9	+5·8	+7·0	+6·2	+5·9	+6·8
Equinox	+10·3	+9·6	+9·3	+9·6	+10·3	+11·4	+8·9	+4·4	-6·8	-23·6	-34·7	*-38·9*	-35·6	-25·8	-13·9	-5·6	+4·4	+9·9	+14·4	*+17·6*	*+17·6*	+17·3	+15·5	+14·3
Summer	+8·9	+9·4	+7·6	+9·9	+12·7	+9·9	+1·7	-6·5	-16·3	-28·5	-37·6	*-41·4*	-36·9	-26·6	-13·6	-0·3	+9·4	+17·9	+23·4	*+24·5*	+22·5	+19·9	+16·3	+13·8

WEST COMPONENT

	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
Jan.	-2·9	-2·6	-0·5	0·0	+0·7	-0·6	-2·4	-4·5	-7·5	*-8·0*	-7·0	-1·1	+6·0	*+9·5*	+7·2	+5·8	+5·8	+6·2	+4·8	+1·9	-0·6	-2·0	-4·2	-4·0
Feb.	-0·3	+0·1	+1·3	+1·1	-0·1	-1·2	-5·0	-10·0	-19·5	*-27·1*	-20·5	-7·0	+5·9	+14·8	*+17·1*	+13·2	+9·2	+7·3	+7·1	+6·9	+5·2	+0·3	+0·3	+1·1
Mar.	-6·6	-4·1	-6·3	-6·3	-7·4	-9·0	-12·2	-17·3	-25·5	*-27·2*	-16·7	+6·6	+25·3	*+34·5*	+30·1	+21·3	+15·5	+7·3	+5·3	+5·1	+3·5	-0·9	-8·1	-6·6
Apr.	-1·3	-4·0	-4·3	-4·9	-2·8	-12·3	-20·1	-30·6	*-36·3*	-32·3	-19·9	+1·0	+19·5	+32·7	*+33·0*	+25·5	+19·1	+12·7	+8·3	+7·1	+5·7	+1·5	+0·9	+1·7
May	+6·7	+3·5	+0·5	-5·5	-12·6	-24·1	-36·0	-40·1	*-41·0*	-29·4	-11·5	+8·5	+23·7	*+31·5*	+30·6	+23·7	+15·8	+8·9	+6·9	+8·2	+9·9	+7·5	+8·6	+5·7
June	+3·1	+0·8	-3·3	-11·5	-21·5	-31·9	-36·1	*-40·6*	-39·9	-29·8	-14·3	+6·4	+29·6	+34·9	*+37·1*	+30·5	+20·5	+13·5	+10·8	+9·5	+7·7	+7·3	+8·6	+8·7
July	-1·9	-3·3	-8·9	-12·1	-17·8	-29·7	-38·7	*-40·1*	-39·6	-27·8	-13·1	+7·1	+26·1	+35·5	*+36·2*	+32·7	+26·3	+17·9	+14·7	+10·8	+11·0	+7·5	+5·9	+1·2
Aug.	-2·3	-8·0	-13·1	-9·2	-18·9	-28·1	-31·9	-35·0	*-39·8*	-32·4	-19·0	+5·6	+29·7	+42·0	*+42·6*	+35·8	+25·7	+15·1	+9·8	+10·6	+9·0	+8·3	+3·9	-0·5
Sept.	-8·4	-11·5	-14·3	-14·9	-13·5	-17·5	-25·1	-32·3	*-37·7*	-28·2	-10·7	+12·6	+30·4	*+36·1*	+34·9	+27·8	+20·6	+12·9	+14·1	+14·7	+13·5	+5·2	-3·4	-5·3
Oct.	-3·2	-5·4	-4·8	-5·4	-7·3	-8·8	-11·4	-16·5	-23·3	*-23·8*	-12·0	+2·7	+13·8	*+17·4*	+16·3	+10·9	+11·1	+13·0	+11·2	+10·1	+7·7	+5·0	+2·2	+0·4
Nov.	-3·5	-5·7	-3·1	-4·6	-3·6	-5·5	-7·5	-9·7	-13·5	*-14·5*	-4·4	+5·5	+11·8	*+12·8*	+12·5	+10·0	+8·9	+8·4	+9·5	+6·7	+5·6	+1·7	-5·2	-12·4
Dec.	-7·2	-5·7	-5·5	-3·6	-3·0	-2·0	-4·3	-3·4	-4·8	-6·1	-4·4	+2·7	+8·1	+13·0	*+14·7*	+11·7	+8·1	+5·0	+4·7	+1·3	-1·5	-4·4	-5·8	*-7·4*
Year	-2·3	-3·8	-5·2	-6·4	-9·0	-14·3	-19·3	-23·4	*-27·4*	-23·9	-12·8	+4·2	+19·2	*+26·3*	+26·1	+20·8	+15·5	+10·7	+9·0	+7·7	+6·4	+3·1	+0·3	-1·5
Winter	-3·5	-3·5	-2·0	-1·7	-1·5	-2·3	-4·8	-6·9	-11·4	*-14·0*	-9·1	+0·1	+8·0	+12·6	*+12·9*	+10·2	+8·0	+6·7	+6·5	+4·2	+2·2	-1·1	-3·7	-5·7
Equinox	-4·8	-6·2	-7·5	-7·9	-7·8	-11·9	-17·2	-24·2	*-30·7*	-27·9	-14·9	+5·7	+22·3	*+30·2*	+28·6	+21·4	+16·5	+11·4	+9·7	+9·3	+7·6	+2·7	-2·1	-2·5
Summer	+1·4	-1·8	-6·2	-9·6	-17·7	-28·5	-35·7	-38·9	*-40·1*	-29·9	-14·5	+6·9	+27·3	+35·9	*+36·6*	+30·7	+22·1	+13·9	+10·6	+9·8	+9·3	+7·7	+6·8	+3·8

VERTICAL COMPONENT

	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
Jan.	+1·1	+0·9	+0·8	+0·7	-0·1	-0·5	-1·1	-2·1	-1·8	-3·1	-2·9	-3·5	*-4·1*	-0·3	*+2·8*	+2·3	+2·1	+1·9	+1·7	+1·9	+1·6	+0·5	+0·7	+0·5
Feb.	+1·0	+1·0	+1·3	+1·2	+1·0	+1·2	+1·2	+2·2	*+5·3*	+2·0	-2·6	-3·8	-4·8	*-5·6*	-3·3	-1·4	0·0	+0·8	+0·4	+0·2	+1·5	+1·0	+0·6	-0·4
Mar.	-0·8	-1·5	+0·3	+0·8	+1·7	+0·3	+0·4	+2·1	+3·5	+2·8	-2·9	-11·1	*-12·2*	-8·5	-2·9	+2·4	+4·7	*+6·3*	+4·4	+2·5	+1·3	+2·2	+2·3	+1·9
Apr.	+6·4	+6·4	+7·7	*+7·8*	+5·6	+4·0	+5·2	+4·6	+1·7	-1·8	-8·2	-13·2	*-14·8*	-14·6	-7·3	-3·4	-1·8	+0·8	+3·4	+2·4	+2·7	+2·4	+2·2	+1·8
May	+4·7	+5·6	+6·9	+7·8	+9·6	*+10·1*	+9·8	+6·0	-1·5	-11·6	-20·7	*-23·0*	-21·9	-16·2	-7·3	-0·6	+3·8	+7·7	+8·1	+7·4	+5·2	+4·2	+3·5	+2·4
June	-0·2	-1·3	-0·4	+4·7	+7·0	+8·1	+5·0	+2·3	-0·2	-5·5	-11·8	-14·5	*-15·6*	-12·1	-6·0	+0·7	+6·6	*+9·7*	+9·2	+8·3	+5·6	+3·3	0·0	-2·9
July	+4·1	+2·8	+3·1	+4·4	+6·0	+7·9	+6·0	+2·4	-1·7	-11·4	-15·1	-18·6	*-19·3*	-14·0	-8·5	-4·2	+2·4	+8·7	*+11·6*	+11·4	+9·1	+6·4	+3·9	+2·6
Aug.	+1·8	-0·4	0·0	+0·2	+2·8	+4·7	+3·0	+3·0	0·0	-6·8	-11·0	-16·2	*-18·6*	-12·6	-2·0	+5·6	+7·2	*+8·7*	+7·8	+5·6	+4·8	+3·6	+4·0	+4·8
Sept.	+5·8	+1·0	+0·6	+1·4	+1·2	+2·2	+4·0	+3·2	-0·4	-7·4	-12·0	*-15·0*	-14·4	-12·4	-7·4	-0·6	+5·2	*+8·6*	+6·8	+7·8	+8·4	+7·4	+5·8	+0·2
Oct.	+4·2	+3·5	+2·4	+1·4	+0·8	+1·1	+0·8	+2·4	*+4·6*	+2·3	-4·4	*-9·8*	-8·6	-5·7	-2·8	+0·6	-0·2	-0·7	+1·0	+1·0	+1·2	+1·7	+1·6	+1·6
Nov.	+1·9	+1·7	+0·7	+0·3	+0·3	+0·7	+0·5	+1·1	*+2·9*	-0·1	*-5·1*	-4·9	-2·9	-1·1	-0·1	+0·5	-0·3	-0·9	-0·5	+1·1	+1·5	+2·1	+2·1	-1·5
Dec.	+2·6	+1·8	+1·1	+0·2	-0·2	-0·6	-1·2	-1·4	-1·7	-3·0	-5·2	-5·8	-4·2	*-4·4*	-2·7	+1·6	+4·0	*+4·2*	+3·8	+4·0	+3·7	+2·2	+1·2	0·0
Year	+2·7	+1·8	+2·0	+2·6	+3·0	+3·3	+2·8	+2·1	+0·9	-3·6	-8·5	-11·6	*-11·8*	-9·0	-4·0	+0·3	+2·8	+4·7	*+4·8*	+4·5	+3·9	+3·1	+2·3	+0·9
Winter	+1·7	+1·3	+1·0	+0·6	+0·3	+0·2	-0·1	-0·1	+1·2	-1·1	-3·9	*-4·5*	-4·0	-2·9	-0·8	+0·7	+1·5	+1·5	+1·3	+1·8	*+2·1*	+1·5	+1·1	-0·3
Equinox	+3·9	+2·3	+2·7	+2·9	+2·3	+1·9	+2·6	+3·1	+2·3	-1·0	-6·9	-12·3	*-12·5*	-10·3	-5·1	-0·3	+2·0	+3·7	*+3·9*	+3·4	+3·4	+3·4	+3·0	+1·4
Summer	+2·6	+1·7	+2·4	+4·3	+6·3	+7·7	+5·9	+3·4	-0·9	-8·8	-14·7	-18·1	*-18·9*	-13·7	-5·9	+0·4	+5·0	+8·7	*+9·2*	+8·2	+6·2	+4·4	+2·9	+1·7

INTERNATIONAL QUIET DAYS

Departures from the mean of the 24 hourly values (uncorrected for non-cyclic change)

164 ESKDALEMUIR

DECLINATION (measured positive towards the west)

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24
	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′
Jan.	-0·63	-0·58	-0·14	-0·07	-0·02	-0·36	-0·79	-1·22	*-1·68*	-1·47	-0·92	+0·36	+1·81	*+2·36*	+1·70	+1·25	+1·14	+1·10	+0·75	+0·16	-0·38	-0·59	-0·92	-0·86
Feb.	-0·28	-0·28	-0·10	-0·20	-0·44	-0·76	-1·56	-2·52	-4·20	*-5·18*	-3·20	-0·06	+2·54	*+3·92*	*+3·92*	+2·92	+1·94	+1·40	+1·24	+1·08	+0·66	-0·34	-0·34	-0·16
Mar.	-1·72	-1·18	-1·57	-1·72	-2·00	-2·44	-3·04	-4·02	*-5·17*	-4·76	-2·10	+2·90	+6·60	*+8·08*	+6·83	+4·76	+3·20	+1·40	+0·68	+0·44	-0·05	-0·96	-2·32	-1·84
Apr.	-0·74	-1·23	-1·23	-1·36	-0·95	-3·03	-4·54	-6·43	*-7·17*	-5·58	-2·41	+2·17	+5·82	*+8·05*	+7·43	+5·40	+3·59	+1·95	+0·94	+0·61	+0·31	-0·54	-0·59	-0·47
May	+1·04	+0·48	-0·11	-1·38	-3·00	-5·40	-7·52	*-8·00*	-7·73	-4·80	-0·82	+3·44	+6·22	*+7·46*	+6·75	+4·76	+2·72	+0·98	+0·48	+0·76	+1·13	+0·76	+1·16	+0·62
June	+0·45	-0·16	-1·02	-2·71	-4·80	-6·72	-7·27	*-7·92*	-7·54	-4·93	-1·40	+2·96	+7·59	*+8·24*	+8·12	+6·37	+3·98	+1·98	+0·97	+0·70	+0·56	+0·59	+0·88	+1·08
July	-0·65	-0·95	-2·04	-2·83	-4·17	-6·41	*-7·69*	-7·51	-7·06	-4·39	-1·17	+3·09	+6·75	*+8·11*	+7·74	+6·29	+4·69	+2·77	+1·91	+1·03	+1·22	+0·81	+0·63	-0·17
Aug.	-1·23	-2·41	-3·19	-2·55	-4·59	-6·30	-6·79	-7·11	*-7·43*	-5·25	-1·91	+3·23	+7·95	*+10·01*	+9·49	+7·55	+4·97	+2·46	+1·21	+1·25	+0·83	+0·65	-0·01	-0·83
Sept.	-2·24	-2·90	-3·53	-3·52	-3·24	-3·92	-5·32	-6·44	*-6·99*	-4·48	-0·52	+4·34	+7·92	*+8·62*	+7·81	+5·88	+3·84	+1·86	+1·88	+1·88	+1·83	+0·28	-1·34	-1·70
Oct.	-1·04	-1·42	-1·34	-1·48	-1·92	-2·28	-2·66	-3·56	*-4·50*	-3·82	-1·08	+2·00	+3·94	*+4·28*	+3·60	+2·36	+2·10	+2·40	+1·94	+1·58	+1·06	+0·42	-0·12	-0·46
Nov.	-0·85	-1·33	-0·80	-1·15	-0·93	-1·31	-1·69	-2·05	-2·68	-2·53	-0·23	+1·99	*+3·15*	+3·07	+2·82	+2·17	+1·77	+1·51	+1·61	+1·07	+0·80	+0·05	-1·39	*-3·07*
Dec.	-1·53	-1·26	-1·19	-0·88	-0·80	-0·65	-1·16	-0·88	-1·15	-1·14	-0·57	+0·94	+2·01	+3·04	*+3·35*	+2·72	+1·86	+1·05	+0·86	+0·12	-0·53	-1·08	-1·41	*-1·72*
Year	-0·79	-1·10	-1·35	-1·65	-2·24	-3·30	-4·17	-4·81	*-5·27*	-4·03	-1·36	+2·28	+5·19	*+6·27*	+5·80	+4·37	+2·98	+1·74	+1·21	+0·89	+0·62	0·00	-0·48	-0·80
Winter	-0·82	-0·86	-0·56	-0·57	-0·55	-0·77	-1·30	-1·67	-2·43	*-2·58*	-1·23	+0·81	+2·38	*+3·10*	+2·95	+2·27	+1·68	+1·27	+1·11	+0·61	+0·14	-0·49	-1·01	-1·45
Equinox	-1·43	-1·68	-1·92	-2·02	-2·03	-2·92	-3·89	-5·11	*-5·96*	-4·66	-1·53	+2·85	+6·07	*+7·26*	+6·42	+4·60	+3·18	+1·90	+1·36	+1·13	+0·79	-0·20	-1·09	-1·12
Summer	-0·10	-0·76	-1·59	-2·37	-4·14	-6·21	-7·32	*-7·63*	-7·44	-4·84	-1·33	+3·18	+7·13	*+8·45*	+8·03	+6·24	+4·09	+2·05	+1·14	+0·93	+0·93	+0·70	+0·67	+0·17

INCLINATION

	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′
Jan.	+0·02	-0·01	-0·04	-0·10	-0·25	-0·36	*-0·47*	-0·45	-0·17	+0·28	+0·78	*+0·81*	+0·71	+0·50	+0·33	+0·08	-0·09	-0·29	-0·36	-0·34	-0·34	-0·22	-0·02	-0·01
Feb.	-0·31	-0·44	-0·53	-0·62	-0·63	*-0·73*	-0·71	-0·53	+0·06	+0·95	+1·69	*+2·08*	+1·85	+1·04	+0·36	+0·14	-0·02	-0·22	-0·41	-0·59	-0·63	-0·59	-0·61	-0·60
Mar.	-0·50	-0·52	-0·33	-0·54	-0·59	-0·79	-0·67	-0·47	+0·49	+1·64	*+2·15*	+1·99	+1·54	+0·92	+0·57	+0·39	-0·02	-0·06	-0·57	-0·91	*-1·17*	-1·10	-0·85	-0·61
Apr.	-0·55	-0·41	-0·29	-0·28	-0·41	-0·51	-0·26	+0·23	+0·89	+1·92	+2·58	*+2·65*	+2·16	+1·30	+0·43	-0·14	-0·76	-1·13	-1·18	*-1·33*	-1·30	-1·26	-1·14	-1·21
May	-0·47	-0·28	-0·16	-0·13	-0·26	-0·17	+0·42	+0·94	+1·47	+1·94	*+1·97*	+1·94	+1·27	+0·77	+0·20	-0·42	-0·89	-1·19	-1·32	-1·31	*-1·36*	-1·18	-0·93	-0·84
June	-0·34	-0·52	-0·48	-0·30	-0·19	+0·27	+0·73	+1·12	+1·44	+2·00	*+2·21*	+2·11	+1·62	+0·99	+0·24	-0·15	-0·42	-1·13	-1·81	*-1·82*	-1·49	-1·39	-1·46	-1·25
July	-0·27	-0·29	-0·15	-0·31	-0·46	+0·03	+0·94	+1·61	+2·01	+2·04	*+2·11*	+1·97	+1·37	+0·53	-0·14	-1·09	-1·33	-1·37	-1·59	*-1·66*	-1·48	-1·05	-0·84	-0·60
Aug.	-1·08	-1·11	-0·61	-0·91	-0·83	-0·38	+0·04	+0·58	+1·56	+2·34	*+2·97*	+2·73	+2·05	+1·37	+0·63	+0·05	-0·58	-0·94	-1·13	-1·40	-1·53	*-1·62*	-1·19	-0·99
Sept.	-0·56	-0·69	-0·72	-0·52	-0·52	-0·25	+0·14	+0·74	+1·56	+2·16	*+2·42*	+2·18	+1·89	+1·13	+0·42	-0·07	-0·71	-1·14	-1·56	*-1·72*	-1·40	-1·08	-0·81	-0·89
Oct.	-0·44	-0·33	-0·43	-0·48	-0·53	-0·60	-0·36	-0·02	+0·79	+1·94	*+2·13*	+1·93	+1·33	+0·75	+0·14	+0·08	-0·40	-0·56	-0·65	-0·84	-0·86	*-0·93*	-0·87	-0·80
Nov.	-0·10	-0·14	-0·20	-0·26	-0·24	-0·21	-0·14	+0·05	+0·37	+0·85	+0·95	*+1·13*	+0·91	+0·52	+0·25	+0·08	-0·20	-0·43	-0·65	-0·50	-0·56	-0·44	-0·38	*-0·70*
Dec.	+0·06	-0·02	+0·01	-0·17	-0·26	-0·36	*-0·41*	-0·28	-0·24	+0·18	*+0·44*	+0·42	+0·36	+0·31	+0·28	+0·39	+0·30	+0·10	-0·11	-0·16	-0·24	-0·16	-0·23	-0·22
Year	-0·38	-0·40	-0·33	-0·38	-0·43	-0·34	-0·06	+0·29	+0·85	+1·52	*+1·87*	+1·83	+1·42	+0·84	+0·31	-0·05	-0·42	-0·70	-0·95	*-1·05*	-1·03	-0·92	-0·78	-0·73
Winter	-0·09	-0·16	-0·19	-0·29	-0·34	-0·41	-0·43	-0·31	0·00	+0·57	+0·97	*+1·11*	+0·96	+0·59	+0·30	+0·17	0·00	-0·21	-0·38	-0·39	*-0·44*	-0·35	-0·31	-0·38
Equinox	-0·52	-0·49	-0·45	-0·45	-0·52	-0·54	-0·29	+0·12	+0·93	+1·92	*+2·32*	+2·18	+1·73	+1·03	+0·39	+0·07	-0·47	-0·72	-0·99	*-1·20*	-1·18	-1·09	-0·92	-0·87
Summer	-0·54	-0·55	-0·35	-0·41	-0·44	-0·07	+0·53	+1·06	+1·62	+2·08	*+2·32*	+2·19	+1·58	+0·91	+0·24	-0·40	-0·81	-1·16	-1·46	*-1·55*	-1·46	-1·31	-1·10	-0·92

HORIZONTAL FORCE

	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
Jan.	+0·1	+0·5	+0·9	+1·7	+3·7	+5·2	*+6·5*	+5·9	+1·9	-5·3	-12·7	*-13·3*	-12·1	-7·5	-3·9	-0·3	+2·1	+5·0	+5·9	+5·7	+5·7	+3·5	+0·5	+0·3
Feb.	+5·0	+6·9	+8·3	+9·6	+9·7	*+11·3*	+11·0	+8·7	+1·1	-13·4	-26·1	*-32·3*	-29·2	-17·5	-6·5	-2·6	+0·3	+3·5	+6·2	+8·9	+9·9	+9·2	+9·3	+8·7
Mar.	+7·1	+7·2	+5·0	+8·3	+9·4	+11·8	+10·1	+7·8	-6·0	-23·3	-33·0	*-33·6*	-27·3	-16·8	-9·6	-4·9	+2·0	+3·2	+10·1	+14·4	*+17·8*	+17·1	+13·4	+9·8
Apr.	+10·5	+8·4	+7·1	+7·0	+8·2	+9·1	+5·8	-1·8	-12·5	-29·2	-41·3	*-44·2*	-37·5	-24·6	-9·1	+0·8	+10·6	+17·1	+18·8	*+20·6*	+20·3	+19·6	+17·7	+18·6
May	+8·7	+6·2	+4·9	+4·8	+7·4	+6·3	-2·6	-11·8	-22·3	-33·0	-36·9	*-37·2*	-26·9	-17·4	-5·7	+6·0	+14·6	+20·5	*+22·6*	+22·2	+22·1	+19·0	+15·1	+13·4
June	+5·0	+7·3	+7·0	+6·2	+5·4	-1·1	-9·0	-15·8	-21·4	-31·7	*-37·2*	-36·6	-29·8	-19·1	-5·8	+2·4	+8·6	+20·3	*+30·2*	+30·0	+24·2	+21·9	+21·6	+17·4
July	+5·5	+5·4	+3·3	+6·2	+9·0	+2·5	-11·8	-23·0	-30·5	-34·4	*-36·9*	-36·0	-27·5	-13·0	-1·1	+14·6	+20·6	+23·5	+27·8	*+28·8*	+25·3	+18·0	+13·9	+9·8
Aug.	+16·7	+16·4	+9·1	+13·5	+13·3	+7·4	+0·5	-7·5	-23·1	-37·2	*-48·1*	-46·5	-37·3	-25·0	-10·1	+1·3	+11·3	+17·2	+19·7	+22·9	+24·5	*+25·4*	+19·1	+16·5
Sept.	+10·5	+10·6	+10·9	+8·2	+8·2	+4·5	-0·6	-9·8	-23·3	-34·8	*-40·3*	-37·8	-33·3	-21·4	-8·9	+0·8	+12·4	+20·1	+25·6	*+28·4*	+23·9	+18·8	+14·1	+13·2
Oct.	+8·1	+6·2	+7·3	+7·6	+8·2	+9·3	+5·6	+1·2	-10·1	-28·0	*-33·3*	-32·2	-22·9	-13·2	-3·1	-1·0	+5·8	+8·1	+10·0	+12·9	+13·2	*+14·4*	+13·5	+12·4
Nov.	+2·2	+2·7	+3·2	+4·0	+3·6	+3·3	+2·2	-0·4	-4·4	-12·7	-16·0	*-18·6*	-14·6	-8·1	-3·8	-1·0	+2·8	+6·1	+9·4	+7·8	+8·8	+7·3	+6·4	*+9·8*
Dec.	+0·1	+1·0	+0·3	+2·6	+3·8	+5·1	*+5·6*	+3·6	+2·9	-3·8	*-8·5*	-8·4	-6·9	-6·2	-5·1	-5·2	-3·0	+0·1	+3·0	+3·8	+4·9	+3·2	+3·9	+3·2
Year	+6·6	+6·6	+5·6	+6·6	+7·5	+6·2	+1·9	-3·6	-12·3	-23·9	-30·9	*-31·4*	-25·4	-15·8	-6·1	+0·9	+7·3	+12·1	+15·8	*+17·2*	+16·7	+14·8	+12·4	+11·1
Winter	+1·9	+2·8	+3·2	+4·5	+5·2	+6·2	+6·3	+4·5	+0·4	-8·8	-15·8	*-18·1*	-15·7	-9·8	-4·8	-2·3	+0·5	+3·7	+6·1	+6·5	*+7·3*	+5·8	+5·0	+5·5
Equinox	+9·1	+8·1	+7·6	+7·8	+8·5	+8·7	+5·2	-0·7	-13·0	-28·8	*-37·0*	-36·9	-30·3	-19·0	-7·7	-1·1	+7·7	+12·1	+16·1	*+19·1*	+18·8	+17·5	+14·7	+13·5
Summer	+9·0	+8·8	+6·1	+7·7	+8·8	+3·8	-5·7	-14·5	-24·3	-34·1	*-39·8*	-39·1	-30·4	-18·6	-5·7	+6·1	+13·8	+20·4	+25·1	*+26·0*	+24·0	+21·1	+17·4	+14·3

DIURNAL INEQUALITIES OF THE GEOGRAPHICAL COMPONENTS OF MAGNETIC FORCE

INTERNATIONAL DISTURBED DAYS

Departures from the mean of the 24 hourly values (uncorrected for non-cyclic change)

165 ESKDALEMUIR

NORTH COMPONENT

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
Jan.	+7·6	+8·2	+9·0	*+20·8*	+11·7	+5·2	+13·4	+3·4	−1·2	−14·3	*−25·9*	−24·5	−18·3	−2·1	+3·9	+11·2	+12·9	+3·9	+3·2	−9·5	−7·2	−6·0	−1·7	−3·6
Feb.	−12·0	+15·4	+11·9	+17·0	+17·1	*+31·2*	+26·2	+22·0	+10·2	−6·9	−22·1	−37·4	*−37·6*	−27·2	−9·0	−5·6	+1·1	+4·7	+2·9	+0·8	+4·3	+2·5	+5·2	−14·8
Mar.	+14·9	+14·5	+15·4	+18·2	+40·9	+40·3	+30·5	+10·3	−7·8	−28·4	−35·8	−28·4	−27·0	−14·5	+27·1	+55·1	*+83·5*	+38·0	+38·5	+3·4	−38·0	−44·7	−75·1	*−131·1*
Apr.	+9·0	+4·8	+5·8	+11·3	+16·4	+7·1	+8·1	−4·1	−8·7	−30·2	−40·3	*−44·7*	−20·9	−15·9	−16·9	+28·1	+1·5	+22·2	+42·7	*+46·1*	−3·0	+11·3	−38·2	+8·5
May	+19·8	+7·8	+10·1	−1·3	+5·8	+14·7	+11·5	−4·0	−40·8	−34·7	*−44·6*	−40·2	−39·3	−22·2	−16·7	−11·9	+8·5	+19·3	+28·5	*+38·4*	+33·9	+25·1	+20·0	+12·2
June	+9·0	+13·6	+3·7	−3·5	+0·9	+2·8	−4·8	−19·0	−41·1	−40·9	−44·0	*−48·9*	−35·0	−27·3	−15·0	−4·8	+9·2	+54·6	*+58·2*	+51·9	+38·6	+24·0	+13·4	+4·6
July	−10·5	−10·5	−7·2	+1·5	+8·5	+13·9	−4·0	−14·9	−18·6	−44·0	−52·5	*−58·3*	−45·5	−22·4	−9·0	+9·0	+18·4	+50·2	*+92·3*	+70·7	+64·9	+12·3	−23·6	−20·9
Aug.	−54·7	−3·3	+6·5	+12·5	+13·8	+3·6	+10·6	+3·5	−16·5	*−80·2*	−65·7	−36·0	−32·9	−9·4	+26·3	+25·5	+35·1	+34·2	*+52·6*	+41·8	+40·3	+15·4	−20·9	−2·5
Sept.	−12·8	−20·9	+0·9	+3·1	+15·8	+6·8	−7·7	−23·9	−35·3	−42·5	−59·0	−52·9	−38·6	−13·3	+44·5	+90·5	*+98·1*	+88·7	+51·2	+18·9	+3·3	−29·2	−25·1	*−60·7*
Oct.	+6·7	−1·8	+19·6	+21·7	+27·6	+18·5	−0·4	+1·1	−12·1	−28·1	−42·7	−48·4	*−50·1*	−33·6	−12·0	*+38·3*	+34·7	+27·2	+16·7	+2·8	−4·1	+7·3	+20·1	−9·2
Nov.	−11·0	−9·9	+15·7	*+21·0*	+20·6	+20·8	+13·9	+14·6	+9·3	−2·4	−5·5	−5·5	−20·3	−4·8	−2·4	−8·9	−2·4	−4·9	+3·1	+3·7	+9·4	−3·4	*−30·3*	−20·5
Dec.	+6·9	+2·6	+11·5	+11·5	*+16·2*	+15·0	+13·8	+13·3	+12·6	+0·9	−8·1	−13·6	*−20·9*	−20·1	−20·9	−12·3	−14·4	−9·6	−9·4	−4·0	+4·5	+9·6	+7·2	+7·9
Year	−2·3	+1·7	+8·7	+11·2	+16·3	+15·0	+9·2	+0·2	−12·5	−29·3	*−37·2*	−36·6	−32·3	−17·8	0·0	+17·8	+23·8	+27·3	*+31·7*	+22·1	+12·2	+2·0	−12·4	−19·2
Winter	−2·2	+4·1	+12·0	+17·6	+16·5	*+18·0*	+16·8	+13·3	+7·7	−5·7	−15·4	−20·3	*−24·3*	−13·5	−7·0	−3·9	−0·7	−1·4	0·0	−2·2	+2·7	+0·7	−4·9	−7·7
Equinox	+4·3	−0·9	+10·4	+13·5	+25·2	+18·1	+7·6	−4·1	−15·9	−32·3	−44·5	−43·5	−34·1	−19·3	+10·7	+53·0	*+54·5*	+44·1	+37·3	+17·8	−10·5	−13·9	−29·7	*−48·2*
Summer	−9·1	+1·9	+3·3	+2·3	+7·3	+8·8	+3·4	−8·6	−29·2	−49·9	*−51·7*	−45·9	−38·2	−20·4	−3·6	+4·4	+17·8	+39·5	*+58·0*	+50·7	+44·5	+19·1	−2·8	−1·7

WEST COMPONENT

	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
Jan.	−10·5	−14·1	−9·6	−1·2	−11·8	−2·7	−0·5	+1·9	−3·1	−8·3	−2·0	+8·2	+19·9	+24·0	+30·8	*+33·3*	+18·0	+13·9	+1·2	−14·6	−19·8	−16·5	−16·2	*−20·2*
Feb.	−15·0	−21·6	−31·6	−9·9	−6·3	−6·0	−3·0	−6·4	−10·9	−9·9	−1·5	+9·6	+23·5	+37·4	*+50·5*	+41·6	+37·0	+15·8	+15·1	+3·1	−18·5	−34·1	*−38·2*	−20·8
Mar.	−24·3	−47·1	−48·9	−21·6	−11·0	−3·8	+10·7	+11·6	−9·9	−5·1	−7·2	+19·4	+42·5	+49·6	*+62·5*	+58·3	+51·0	+29·7	+19·3	+6·8	−28·5	−30·0	−48·0	*−75·9*
Apr.	−26·8	−27·3	−16·3	−19·7	−15·4	−14·9	−10·0	−16·4	−21·9	−13·7	−5·8	+6·2	+31·8	+38·1	+42·5	*+45·9*	+29·5	+23·4	+25·3	+22·5	−4·8	−7·1	*−38·5*	−26·6
May	−7·1	−16·8	−2·6	−16·4	−35·6	−34·9	−28·8	*−40·2*	−53·3	−8·5	−3·1	+16·5	+29·4	*+38·7*	+37·0	+29·3	+29·0	+19·3	+13·3	+11·2	+4·8	+8·5	+10·3	−0·1
June	+2·3	−14·1	−15·1	−9·0	−36·4	−29·6	−34·5	*−49·5*	−39·0	−24·9	−1·2	+12·2	+22·1	+27·6	+28·8	+29·9	+25·5	*+34·7*	+18·9	+16·1	+18·8	+11·1	+4·9	+0·1
July	−13·3	−9·7	−3·8	−14·5	−23·6	−38·1	*−42·8*	−40·0	−39·5	−38·8	−25·9	−2·3	+21·0	+34·8	+33·7	+33·9	+24·9	+31·7	*+36·7*	+31·2	+32·3	+15·9	−0·6	−3·2
Aug.	−18·3	−6·4	−27·0	−24·1	−14·5	−9·1	−18·9	−34·4	−33·3	*−54·5*	−35·9	+17·1	+35·3	+44·1	*+51·7*	+41·1	+30·7	+24·1	+17·3	+10·4	+15·2	+2·3	−5·1	−7·8
Sept.	−47·7	−41·9	*−54·6*	−25·1	−5·5	−6·0	−16·1	−37·6	−37·2	−6·1	+20·2	+32·3	+49·6	+55·7	+61·0	*+67·4*	+51·5	+37·5	−1·2	−1·9	−36·9	−13·3	−26·5	−17·7
Oct.	−36·1	−34·3	−37·3	−25·9	−15·2	+1·4	+9·9	+12·7	+3·3	−6·3	+13·2	+25·7	+44·4	*+51·7*	+43·0	+38·1	+38·2	+27·2	+4·5	−8·0	−25·8	−33·7	−43·7	*−46·9*
Nov.	−28·5	−25·3	−20·9	−9·4	−5·8	+3·5	+9·7	+7·5	−1·3	−3·5	+8·5	+22 2	+25·4	*+42·7*	+29·9	+36·3	+21·1	−6·3	−0·3	+1·0	−11·6	−35·7	*−39·7*	−19·4
Dec.	−20·9	−28·4	−13·1	−6·7	+0·6	+2·3	+7·4	+6·3	+5·4	+2·0	+5·3	+13·7	+22·8	+24·1	*+26·4*	+21·9	+14·2	+5·4	+2·0	−7·6	−9·5	−27·4	*−29·5*	−16·8
Year	−20·5	*−23·9*	−23·4	−15·3	−15·0	−11·5	−9·7	−15·4	−20·1	−14·8	−3·0	+15·0	+30·6	+39·0	*+41·5*	+39·8	+30·9	+21·4	+12·7	+5·9	−7·0	−13·3	−22·6	−21·3
Winter	−18·8	−22·3	−18·8	−6·8	−5·8	−0·7	+3·4	+2·3	−2·5	−4·9	+2·6	+13·4	+22·9	+32·1	*+34·4*	+33·3	+22·6	+7·2	+4·5	−4·5	−14·8	−28·4	*−30·9*	−19·3
Equinox	−33·7	−37·7	−39·3	−23·1	−11·8	−5·8	−1·4	−7·5	−16·4	−7·8	+5·1	−20·9	+42·1	+48·8	+52·3	*+52·4*	+42·6	+29·5	+12·0	+4·8	−24·0	−21·1	−39·2	*−41·8*
Summer	−9·1	−11·7	−12·1	−16·0	−27·5	−27·9	−31·3	−41·0	*−41·3*	−31·7	−16·5	+10·9	+27·0	+36·3	*+37·8*	+33·6	+27·5	+27·5	+21·6	+17·2	+17·8	+9·5	+2·4	−2·8

VERTICAL COMPONENT

	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
Jan.	−8·8	−8·8	−9·4	−20·0	*−44·4*	−26·8	−37·4	−30·2	−22·8	−16·4	−13·8	−8·2	−1·4	+8·8	+12·2	+26·8	+28·6	+31·2	*+41·8*	+34·8	+24·4	+18·0	+13·2	+8·6
Feb.	−21·1	−17·2	−30·9	*−39·1*	−32·7	−32·2	−24·1	−18·5	−13·1	−14·2	−13·1	−10·3	−3·9	+9·2	+27·1	+39·1	+49·3	*+54·0*	+40·9	+29·7	+25·3	+10·0	+1·1	−15·3
Mar.	−47·9	−53·9	−63·2	*−77·7*	−57·9	−43·1	−40·9	−38·7	−36·6	−33·3	−20·7	−8·5	+6·3	+35·7	+71·0	+93·9	*+111·3*	+99·9	+93·5	+84·1	+37·8	−8·3	−41·5	−61·3
Apr.	−22·9	−16·0	−14·9	−12·5	−11·3	−18·8	−23·5	−19·1	−16·9	−13·6	−11·5	−3·3	−4·9	+4·8	+9·1	+24·3	+39·7	+38·4	*+49·1*	+42·3	+11·3	+12·8	*−38·3*	−4·3
May	−6·1	−15·1	−29·6	*−43·7*	−38·7	−19·1	−10·7	−6·3	−3·8	−9·7	−13·1	−12·3	−1·9	+10·9	+24·6	*+29·7*	+25·9	+26·1	+24·7	+25·9	+24·4	+16·3	+4·5	−1·9
June	−28·4	−32·7	−37·0	*−61·1*	−55·6	−37·9	−31·4	−25·3	−20·6	−15·3	−16·0	−11·7	+1·6	+15·5	+24·8	+33·9	+41·8	+48·5	*+55·8*	+44·5	+36·4	+28·7	+23·2	+18·3
July	−30·2	*−40·9*	−30·7	−34·2	−22·9	−9·3	−9·8	−12·3	−15·3	−15·8	−15·3	−14·5	−15·2	−2·7	+17·5	+32·4	*+49·9*	+46·5	+40·2	+35·5	+40·9	+24·4	−8·3	−9·9
Aug.	−39·6	*−75·3*	−54·8	−38·6	−34·8	−34·1	−28·6	−18·4	−10·2	−7·3	−6·0	−4·0	+6·4	+27·9	+50·4	+64·0	*+74·4*	+73·5	+56·2	+36·4	+18·6	+8·7	−22·4	−42·4
Sept.	−69·2	−67·5	−64·8	−71·0	*−83·2*	−70·3	−59·4	−29·6	−23·8	−21·5	−9·2	+8·0	+22·4	+37·7	+71·4	+109·8	+134·0	*+140·5*	+114·0	+49·2	+13·2	−13·3	−43·0	−74·4
Oct.	−32·3	−58·4	−59·7	−35·4	−38·4	−39·3	−41·6	−33·8	−27·5	−18·2	−14·1	−2·4	+15·5	+38·4	+55·7	+74·2	+82·0	*+87·5*	+70·8	+43·8	+34·1	+5·4	−41·5	*−64·8*
Nov.	−48·6	*−57·5*	−30·8	−20·1	−16·7	−19·8	−19·3	−15·7	−10·8	−5·3	−4·2	−1·1	+7·2	+20·5	+48·2	+48·7	+57·7	*+61·0*	+42·3	+31·7	+22·6	−8·9	−36·2	−44·9
Dec.	−11·4	−12·7	−18·2	*−23·3*	−20·8	−14·9	−12·6	−10·9	−9·4	−7·9	−7·8	−6·3	−2·8	+2·9	+10·2	+14·5	+21·6	+28·5	*+29·4*	+26·7	+12·8	+8·3	+4·0	+0·1
Year	−30·5	−38·1	−37·0	*−39·7*	−38·1	−30·5	−28·3	−21·6	−17·6	−14·9	−12·1	−6·2	+2·4	+17·5	+35·2	+49·3	+59·7	*+61·3*	+54·9	+40·4	+25·1	+8·5	−15·4	−24·3
Winter	−22·5	−24·1	−22·3	−25·6	*−28·7*	−23·4	−23·3	−18·8	−14·0	−10·9	−9·7	−6·5	−0·2	+10·3	+24·4	+32·3	+39·3	*+43·7*	+38·6	+30·7	+21·3	+6·9	−4·5	−12·9
Equinox	−43·1	−48·9	−50·7	−49·1	−47·7	−42·9	−41·3	−30·3	−26·2	−21·7	−13·9	−1·5	+9·8	+29·1	+51·8	+75·5	*+91·7*	+91·6	+81·9	+54·9	+24·1	−0·9	−41·1	*−51·2*
Summer	−26·1	−41·3	−38·0	*−44·4*	−38·0	−25·1	−20·1	−15·6	−12·5	−12·0	−12·6	−10·6	−2·3	+12·9	+29·3	+40·0	+48·0	*+48·7*	+44·2	+35·6	+30·1	+19·5	−0·7	−9·0

INTERNATIONAL DISTURBED DAYS

Departures from the mean of the 24 hourly values (uncorrected for non-cyclic change)

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DECLINATION (measured positive towards the west)

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24
	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′
Jan.	−2·47	−3·23	−2·35	−1·15	−2·91	−0·77	−0·67	+0·23	−0·59	−1·07	+0·71	+2·73	+4·85	+4·97	+6·11	*+6·29*	+3·11	+2·67	+0·11	−2·57	−3·71	−3·11	−3·23	*−3·95*
Feb.	−2·54	−5·07	−6·94	−2·75	−2·02	−2·57	−1·74	−2·25	−2·66	−1·71	+0·66	+3·57	+6·42	+8·79	*+10·68*	+8·71	+7·48	+3·01	+2·94	+0·59	−3·96	−7·05	*−8·00*	−3·59
Mar.	−5·60	−10·25	*−10·64*	−5·20	−4·02	−2·53	+0·86	+1·92	−1·68	+0·19	+0·08	+5·18	+9·84	+10·75	*+11·58*	+9·50	+6·78	+4·41	+2·26	+1·24	−4·16	−4·17	−6·54	−9·80
Apr.	−5·85	−5·76	−3·57	−4·50	−3·84	−3·33	−2·38	−3·16	−4·09	−1·48	+0·57	+3·20	+7·37	+8·44	*+9·39*	+8·12	+5·94	+3·81	+3·30	+2·58	−0·85	−1·94	*−6·19*	−5·78
May	−2·30	−3·76	−0·96	−3·28	−7·50	−7·73	−6·36	−8·02	*−9·10*	−0·24	+1·28	+5·10	+7·68	*+8·84*	+8·26	+6·48	+5·54	+3·09	+1·48	+0·62	−0·48	+0·66	+1·24	−0·54
June	+0·09	−3·45	−3·23	−1·67	−7·43	−6·14	−6·81	*−9·23*	−6·15	−3·29	+1·65	+4·59	+5·99	*+6·79*	+6·49	+6·29	+4·79	+4·70	+1·33	+1·05	+2·15	+1·23	+0·43	−0·17
July	−2·25	−1·51	−0·47	−3·01	−5·15	−8·34	*−8·53*	−7·49	−7·23	−5·99	−3·01	+2·03	+6·23	*+8·03*	+7·23	+6·51	+4·27	+4·28	+3·49	+3·29	+3·77	+2·71	+0·89	+0·25
Aug.	−1·38	−1·16	−5·79	−5·44	−3·54	−2·00	−4·32	−7·16	−6·07	*−7·64*	−4·48	+5·04	+8·60	+9·38	*+9·39*	+7·28	+4·74	+3·44	+1·26	+0·32	+1·35	−0·20	−0·14	−1·48
Sept.	−9·16	−7·63	*−11·16*	−5·24	−1·80	−1·51	−2·94	−6·64	−6·06	+0·59	+6·64	+8·84	+11·76	*+11·91*	+10·52	+9·84	+6·28	+3·83	−2·44	−1·20	−7·66	−1·45	−4·32	−1·00
Oct.	−7·64	−6·91	−8·44	−6·21	−4·28	−0·51	+2·04	+2·53	+1·20	−0·09	+4·52	+7·31	+11·20	*+11·97*	+9·28	+6·11	+6·30	+4·37	+0·20	−1·75	−5·08	−7·19	*−9·76*	−9·17
Nov.	−5·33	−4·74	−4·93	−2·82	−2·06	−0·17	+1·38	+0·90	−0·67	−0·62	+1·97	+4·76	+6·05	*+8·90*	+6·19	+7·78	+4·40	−1·07	−0·20	+0·04	−2·77	*−7·12*	−6·79	−3·08
Dec.	−4·56	−5·90	−3·16	−1·86	−0·58	−0·18	+0·92	+0·72	+0·56	+0·36	+1·42	+3·38	+5·54	+5·78	*+6·28*	+5·00	+3·52	+1·52	+0·82	−1·38	−2·12	−6·00	*−6·32*	−3·76
Year	−4·08	−4·95	*−5·14*	−3·59	−3·76	−2·98	−2·38	−3·14	−3·55	−1·75	+1·00	+4·64	+7·63	*+8·71*	+8·45	+7·33	+5·26	+3·17	+1·21	+0·24	−1·96	−2·80	−4·06	−3·51
Winter	−3·73	−4·73	−4·35	−2·15	−1·89	−0·92	−0·03	−0·10	−0·84	−0·76	+1·19	+3·61	+5·71	+7·11	*+7·31*	+6·95	+4·63	+1·53	+0·92	−0·83	−3·14	−5·82	*−6·09*	−3·59
Equinox	−7·06	−7·64	*−8·45*	−5·29	−3·49	−1·97	−0·61	−1·34	−2·66	−0·20	+2·95	+6·13	+10·04	*+10·77*	+10·19	+8·39	+6·33	+4·11	+0·83	+0·22	−4·44	−3·69	−6·70	−6·44
Summer	−1·46	−2·47	−2·61	−3·35	−5·91	−6·05	−6·51	*−7·97*	−7·14	−4·29	−1·14	+4·19	+7·13	*+8·26*	+7·84	+6·64	+4·83	+3·88	+1·89	+1·32	+1·70	+1·10	+0·61	−0·49

INCLINATION

	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′
Jan.	−0·57	−0·56	−0·69	*−1·85*	−1·71	−0·97	−1·80	−1·00	−0·44	+0·65	+1·40	+1·30	+0·89	+0·02	−0·38	−0·54	−0·40	+0·32	+0·81	*+1·69*	+1·36	+1·07	+0·66	+0·73
Feb.	+0·48	−1·14	−1·11	−1·95	−1·85	*−2·77*	−2·28	−1·82	−0·84	+0·24	+1·15	*+2·08*	+2·05	+1·49	+0·56	+0·75	+0·63	+0·81	+0·61	+0·64	+0·61	+0·56	+0·22	+0·89
Mar.	−1·83	−1·63	−1·90	−2·82	*−3·98*	−3·67	−3·18	−1·80	−0·25	+1·11	+1·95	+1·39	+1·33	+1·14	−0·90	−2·13	−3·46	−0·45	−0·49	+1·77	+3·84	+3·16	+4·60	*+8·19*
Apr.	−0·78	−0·33	−0·53	−0·78	−1·14	−0·72	−0·97	+0·03	+0·46	+1·85	+2·45	*+2·78*	+0·81	+0·63	+0·74	−1·89	+0·47	−0·84	−1·95	*−2·31*	+0·54	−0·33	+2·11	−0·30
May	−1·36	−0·67	−1·37	−0·77	−0·85	−0·95	−0·62	+0·67	*+3·34*	+2·17	+2·66	+2·11	+2·13	+1·19	+1·19	+1·11	−0·32	−0·90	−1·46	*−2·05*	−1·70	−1·37	−1·35	−0·85
June	−1·33	−1·51	−0·95	−1·16	−0·93	−0·71	+0·02	+1·32	+2·74	+2·67	+2·52	*+2·76*	+2·04	+1·80	+1·20	+0·74	+0·07	*−2·88*	−2·72	−2·54	−1·91	−1·03	−0·37	+0·15
July	+0·13	−0·19	−0·23	−0·75	−0·80	−0·61	+0·62	+1·24	+1·40	+3·05	+3·45	*+3·51*	+2·33	+0·92	+0·55	−0·27	−0·33	−2·60	*−5·61*	−4·22	−3·72	−0·43	+1·36	+1·18
Aug.	+2·88	−1·56	−1·41	−1·45	−1·57	−0·96	−1·15	−0·21	+1·30	*+5·87*	+4·68	+2·04	+1·84	+0·70	−1·20	−0·67	−0·90	−0·77	−2·32	−2·00	*−2·41*	−0·83	+0·89	−0·78
Sept.	−0·21	+0·29	−0·91	−1·62	−3·03	−2·11	−0·74	+1·36	+2·25	+2·36	*+3·39*	+3·24	+2·42	+1·04	−2·02	*−4·19*	−3·87	−2·89	−0·54	0·00	+0·62	+1·78	+0·96	+2·41
Oct.	−0·74	−0·85	−2·26	−1·95	*−2·56*	−2·21	−1·15	−1·09	+0·07	+1·49	+2·29	+2·78	*+3·07*	+2·45	+1·58	−1·21	−0·79	0·00	+0·59	+1·01	+1·47	+0·12	−1·75	−0·35
Nov.	−0·09	−0·42	−1·51	−1·75	−1·69	*−1·91*	−1·53	−1·45	−0·86	+0·08	+0·14	+0·03	+1·16	+0·23	+0·94	+1·29	+1·30	*+1·92*	+0·85	+0·53	+0·10	+0·50	+1·65	+0·50
Dec.	−0·45	−0·09	−1·03	−1·25	*−1·59*	−1·39	−1·32	−1·23	−1·14	−0·28	+0·27	+0·55	+1·00	+1·06	+1·26	+0·87	+1·29	+1·27	*+1·32*	+1·03	+0·15	−0·04	+0·03	−0·29
Year	−0·32	−0·72	−1·16	−1·51	*−1·81*	−1·59	−1·17	−0·33	+0·67	+1·77	*+2·19*	+2·05	+1·76	+1·06	+0·29	−0·51	−0·52	−0·58	−0·91	−0·53	−0·09	+0·27	+0·75	+0·96
Winter	−0·15	−0·56	−1·09	−1·70	−1·72	*−1·76*	−1·73	−1·38	−0·82	+0·17	+0·74	+0·99	*+1·28*	+0·70	+0·59	+0·59	+0·71	+1·08	+0·90	+0·97	+0·55	+0·52	+0·64	+0·45
Equinox	−0·89	−0·63	−1·40	−1·79	*−2·68*	−2·18	−1·51	−0·37	+0·63	+1·70	+2·52	*+2·54*	+1·91	+1·32	−0·15	−2·35	−1·91	−1·04	−0·60	+0·12	+1·62	+1·18	+1·48	+2·49
Summer	+0·08	−0·98	−0·99	−1·03	−1·04	−0·81	−0·28	+0·75	+2·20	*+3·44*	+3·33	+2·61	+2·09	+1·16	+0·44	+0·23	−0·37	−1·79	*−3·03*	−2·70	−2·43	−0·91	+0·13	−0·07

HORIZONTAL FORCE

	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
Jan.	+5·2	+5·1	+6·8	*+20·1*	+9·0	+4·5	+13·0	+3·7	−1·8	−15·7	*−25·8*	−22·3	−13·8	+2·9	+10·2	+17·9	+16·4	+6·7	+3·4	−12·3	−11·2	−9·3	−5·0	−7·7
Feb.	−14·9	+10·6	+5·1	+14·6	+15·4	*+29·3*	+25·0	+20·2	+7·7	−8·8	−21·9	*−34·6*	−31·9	−18·8	+1·7	+3·2	+8·8	+7·9	+6·0	+1·4	+0·3	−4·6	−2·9	−18·8
Mar.	+9·5	+4·4	+4·9	+13·3	+37·7	+38·6	+32·1	+12·5	−9·7	−28·8	−36·5	−23·7	−17·5	−3·8	+39·5	+66·1	*+92·3*	+43·4	+41·7	+4·7	−43·1	−50·0	−83·5	*−144·1*
Apr.	+3·2	−1·0	+2·3	+7·0	+12·8	+3·8	+5·8	−7·4	−13·1	−32·4	−40·6	−42·4	−13·8	−7·6	−7·7	+37·0	+7·6	+26·6	+47·0	*+49·8*	−3·9	+9·6	*−45·4*	+2·8
May	+17·9	+4·1	+9·4	−4·7	−1·7	+7·1	+5·3	−12·3	*−51·0*	−35·7	−44·3	−35·9	−32·3	−13·7	−8·6	−5·5	+14·3	+22·9	+30·7	*+39·9*	+34·2	+26·3	+21·7	+11·9
June	+9·3	+10·4	+0·5	−5·3	−6·7	−3·4	−11·9	−28·9	*−48·3*	−45·2	−43·3	−45·3	−29·7	−21·0	−8·7	+1·5	+14·3	+60·6	*+60·9*	+54·1	+41·7	+25·8	+14·1	+4·5
July	−13·0	−12·3	−7·8	−1·5	+3·4	+5·7	−12·8	−22·9	−26·4	−51·1	−56·8	*−57·5*	−40·2	−14·7	−1·8	+15·9	+23·2	+55·7	*+98·0*	+75·7	+70·2	+15·3	−23·2	−21·1
Aug.	−57·3	−4·5	+0·8	+7·3	+10·5	+1·7	+6·5	−3·7	−23·0	*−89·7*	−71·7	−31·7	−24·9	−0·1	+36·4	+33·5	+40·7	+38·5	*+55·1*	+43·1	+42·6	+15·5	−21·5	−4·1
Sept.	−22·4	−29·1	−10·4	−2·1	+14·3	+5·4	−10·9	−31·1	−42·2	−42·9	−53·6	−45·1	−27·6	−1·5	+56·2	+102·5	*+106·7*	+94·6	+49·9	+18·1	−4·4	−31·3	−30·0	*−63·1*
Oct.	−0·9	−8·8	+11·5	+15·9	+23·9	+18·4	+1·7	+3·7	−11·1	−28·8	−39·1	*−42·1*	−39·9	−22·2	−2·9	*+45·3*	+41·9	+32·2	+17·3	+1·1	−9·3	+0·2	+10·7	−18·7
Nov.	−16·6	−14·9	+11·0	+18·6	+19·0	*+21·1*	+15·6	+15·8	+8·8	−3·1	−3·6	−0·8	−14·6	+4·1	+3·8	−1·2	+2·0	−6·1	+3·0	+3·8	+6·8	−10·7	*−37·8*	−24·0
Dec.	+2·4	−3·3	+8·6	+9·9	*+16·0*	+15·1	+15·0	+14·3	+13·4	+1·3	−6·8	−10·5	*−15·8*	−14·7	−15·0	−7·5	−11·2	−8·3	−8·8	−5·5	+2·4	+3·7	+1·0	+4·3
Year	−6·5	−3·3	+3·6	+7·8	+12·8	+12·3	+7·0	−3·0	−16·4	−31·7	*−37·0*	−32·7	−25·2	−9·3	+8·6	+25·7	+29·7	+31·2	*+33·7*	+22·8	+10·5	−0·8	−16·8	−23·2
Winter	−6·0	−0·6	+7·9	+15·8	+14·9	*+17·5*	+17·1	+13·5	+7·0	−6·6	−14·5	−17·1	*−19·0*	−6·6	+0·2	+3·1	+4·0	+0·1	+0·9	−3·1	−0·4	−5·2	−11·2	−11·5
Equinox	−2·7	−8·6	+2·1	+8·5	+22·2	+16·5	+7·2	−5·6	−19·0	−33·2	−42·5	−38·3	−24·7	−8·8	+21·3	*+62·7*	+62·1	+49·2	+39·0	+18·4	−15·2	−17·9	−37·1	*−55·8*
Summer	−10·8	−0·6	+0·7	−1·1	+1·4	+2·8	−3·2	−16·9	−37·2	*−55·4*	−54·0	−42·6	−31·8	−12·4	+4·3	+11·3	+23·1	+44·4	*+61·2*	+53·2	+47·2	+20·7	−2·2	−2·2

H*

RANGE OF MEAN DIURNAL INEQUALITIES FOR THE MONTHS, YEAR AND SEASONS OF 1947

The ranges are derived from the diurnal inequalities printed in Tables 161 to 166

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	All days			Quiet days			Disturbed days			All days			Quiet days			Disturbed days		
	N	*W*	*V*	*N*	*W*	*V*	*N*	*W*	*V*	*D*	*I*	*H*	*D*	*I*	*H*	*D*	*I*	*H*
	γ	γ	γ	γ	γ	γ	γ	γ	γ	′	′	γ	′	′	γ	′	′	γ
Jan.	29·4	26·5	22·4	20·7	17·5	6·9	46·7	53·5	86·2	5·98	2·04	27·9	4·04	1·28	19·8	10·24	3·54	43·6
Feb.	49·0	45·6	25·1	43·8	44·2	10·9	68·8	88·7	86·7	9·64	3·03	44·9	9·10	2·81	45·9	18·68	4·85	63·9
Mar.	53·8	61·7	72·4	53·5	61·7	18·5	214·6	138·4	189·0	12·84	3·89	58·0	13·25	3·32	51·4	22·22	12·17	236·4
Apr.	72·9	70·6	34·9	65·1	69·3	22·6	90·8	84·4	87·4	15·37	4·08	72·3	15·22	3·98	64·8	15·24	5·09	95·2
May	75·4	76·2	44·2	61·4	72·5	33·1	83·0	78·9	73·4	16·42	3·98	74·3	15·46	3·33	59·8	17·94	5·39	90·9
June	77·2	77·4	42·6	67·3	77·7	25·3	107·1	84·2	116·9	15·85	4·38	79·8	16·16	4·03	67·4	16·02	5·64	109·2
July	89·3	74·7	39·9	65·4	76·3	30·9	150·6	79·5	90·8	15·20	5·16	90·5	15·80	3·77	65·7	16·56	9·12	155·5
Aug.	79·3	75·0	61·0	70·9	82·4	27·3	132·8	106·2	149·7	15·76	4·71	82·8	17·44	4·59	73·5	17·03	8·28	144·8
Sept.	77·5	68·4	76·4	67·2	73·8	23·6	158·8	122·0	223·7	14·39	4·22	79·8	15·61	4·14	68·7	23·07	7·58	169·8
Oct.	57·0	52·5	51·6	47·2	41·2	14·4	88·4	98·6	152·3	12·08	3·91	55·3	8·78	3·06	47·7	21·73	5·63	87·4
Nov.	31·0	36·0	26·3	32·8	27·3	8·0	51·3	82·4	118·5	8·05	1·94	27·6	6·22	1·83	28·4	16·02	3·83	58·9
Dec.	25·0	33·1	18·4	15·7	22·1	8·6	37·1	55·9	52·7	7·38	1·54	21·9	5·07	0·85	14·1	12·60	2·91	31·8
Year	55·8	54·7	37·6	48·9	53·7	16·6	68·9	65·4	101·0	11·62	2·92	55·0	11·54	2·92	48·6	13·85	4·00	70·7
Winter	32·5	31·8	20·7	26·0	26·9	6·6	42·3	65·3	72·4	7·33	2·10	30·2	5·68	1·55	25·4	13·40	3·04	36·5
Equinox	64·4	62·7	54·3	56·5	60·9	16·4	102·7	94·2	142·9	13·42	3·79	63·0	13·22	3·52	56·1	19·22	5·22	118·5
Summer	79·6	75·2	43·3	65·9	76·7	28·1	109·7	79·1	93·1	15·80	4·51	81·8	16·08	3·87	65·8	16·23	6·47	116·6

NON-CYCLIC CHANGE

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	All days			Quiet days			Disturbed days		
	H	*D*	*V*	*H*	*D*	*V*	*H*	*D*	*V*
	γ	′	γ	γ	′	γ	γ	′	γ
Jan.	−0·2	−0·22	0·0	+0·5	−0·09	−0·9	−10·3	−0·74	+12·0
Feb.	+0·2	+0·13	−0·2	+2·2	+0·04	−1·9	−11·2	−1·19	−9·9
Mar.	−0·4	+0·03	+1·0	+4·9	+0·71	0·0	−112·3	−3·40	−26·2
Apr.	+0·8	+0·01	−0·4	+8·1	+0·01	−4·7	−4·4	+1·32	+18·0
May	−0·1	+0·15	−1·3	+3·1	−1·07	−2·4	−9·5	+0·38	+5·3
June	+0·5	−0·09	+1·0	+9·5	+0·08	−5·0	−19·3	−0·67	+25·3
July	−0·6	−0·18	+0·4	+4·8	+0·16	−3·3	−8·3	+0·36	+2·7
Aug.	−0·1	−0·09	+0·6	+1·7	−0·11	+0·6	−3·7	+0·70	−13·0
Sept.	+0·1	−0·13	+0·8	+6·1	−0·21	−8·0	−18·6	+1·53	−9·1
Oct.	+0·1	+0·10	−0·7	+2·5	+0·11	−2·4	−21·9	−0·61	−40·2
Nov.	−0·3	+0·03	−0·2	+3·2	−2·14	−4·7	−10·9	+0·39	−0·2
Dec.	+0·3	−0·01	−0·3	+3·8	−0·06	−3·6	+1·9	+1·91	+4·2
Year	0·0	−0·02	+0·1	+4·2	−0·21	−3·0	−19·0	0·00	−2·6
Winter	0·0	−0·02	−0·2	+2·4	−0·56	−2·8	−7·6	+0·09	+1·5
Equinox	+0·1	0·00	+0·2	+5·4	+0·15	−3·8	−39·3	−0·29	−14·4
Summer	−0·1	−0·05	+0·2	+4·8	−0·23	−2·5	−10·2	+0·19	+5·1

"Winter" comprises the four months January, February, November, December; "Equinox" the months March, April, September, October; and "Summer" May to August.

MEAN MONTHLY AND ANNUAL VALUES OF TERRESTRIAL MAGNETIC ELEMENTS

For all, *a*, quiet, *q*, and disturbed, *d*, days for *H*, *D* and *V* and for all days for *N*, *W*, *I* and *T*

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	Horizontal force			Declination (west)			Vertical force			North component all days	West component all days	Inclination (north) all days	Total force all days
	a	*q*	*d*	*a*	*q*	*d*	*a*	*q*	*d*				
	16,000γ +			11° +			44,000γ +						
	γ	γ	γ	′	′	′	γ	γ	γ	γ	γ	° ′	γ
Jan.	520	535	503	60·6	60·9	60·4	1143	1135	1152	16158	3438	69 54·0	48071
Feb.	519	528	499	60·1	60·4	59·0	1142	1139	1152	16158	3435	69 54·0	48069
Mar.	506	518	484	59·3	59·8	59·5	1156	1152	1175	16146	3428	69 55·2	48078
Apr.	525	528	507	58·7	58·9	58·8	1150	1148	1162	16166	3430	69 53·8	48079
May	536	535	526	58·0	57·7	57·2	1142	1141	1132	16177	3429	69 52·9	48075
June	539	540	534	57·7	57·2	58·2	1141	1144	1132	16180	3428	69 52·7	48076
July	541	543	538	56·8	57·1	56·7	1148	1141	1171	16183	3424	69 52·7	48083
Aug.	523	534	498	56·4	56·8	55·8	1158	1148	1168	16166	3418	69 54·2	48086
Sept.	515	525	498	55·1	54·9	54·5	1168	1165	1173	16159	3411	69 55·0	48092
Oct.	517	537	500	54·5	55·3	54·2	1172	1161	1184	16162	3408	69 54·9	48097
Nov.	526	538	505	54·3	54·6	53·8	1166	1160	1173	16171	3409	69 54·2	48095
Dec.	534	539	525	53·6	53·7	53·4	1162	1160	1166	16179	3408	69 53·6	48094
Year	525	533	510	57·1	57·3	56·8	1154	1149	1162	16167	3422	69 53·9	48083

HARMONIC COMPONENTS OF THE DIURNAL INEQUALITY OF MAGNETIC FORCE

Values of a_n, b_n in the series $\Sigma(a_n \cos 15nt + b_n \sin 15nt)$, t being reckoned in hours from midnight G.M.T.

Longitude of Eskdalemuir Observatory, 3°12′W.

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	North component								West component								Vertical component							
	a_1	b_1	a_2	b_2	a_3	b_3	a_4	b_4	a_1	b_1	a_2	b_2	a_3	b_3	a_4	b_4	a_1	b_1	a_2	b_2	a_3	b_3	a_4	b_4
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
												ALL DAYS												
Jan.	+8·2	+2·2	−6·4	+0·3	+2·8	−1·9	−0·9	+1·0	−7·3	−6·4	−2·3	+5·7	−0·6	−2·0	+0·9	+1·3	+0·9	−9·2	−0·9	−1·0	+0·4	+0·9	−0·7	+0·2
Feb.	+14·4	+5·3	−11·6	−2·8	+4·9	−1·1	−1·9	+0·9	−8·2	−11·5	−2·7	+8·8	−0·9	−5·4	+1·3	+2·9	−0·4	−10·0	−3·8	−1·7	+2·2	+0·5	−1·2	−0·6
Mar.	+12·9	−3·6	−18·6	+4·1	+3·1	−1·3	+0·1	+0·9	−15·0	−15·7	−1·1	+11·4	−1·7	−9·1	+2·7	+1·6	−10·1	−28·2	−10·1	−2·2	+3·1	+2·1	−1·1	−0·8
Apr.	+22·8	−4·4	−17·7	−0·1	+6·0	−0·8	−0·2	+2·9	−8·2	−20·0	+1·9	+14·7	−4·1	−7·6	+1·1	+2·5	+3·1	−10·2	−8·9	−0·8	+1·3	+2·7	−1·0	+0·5
May	+23·6	−13·4	−17·6	+1·6	+2·8	−0·1	+1·2	+0·1	−5·9	−24·0	+11·1	+12·2	−5·4	−3·6	+0·3	0·0	+6·1	−11·7	−10·9	−0·7	+3·4	−0·7	−0·4	+1·7
June	+23·0	−15·6	−16·3	+1·0	−0·2	−1·0	+1·5	+1·2	−6·5	−28·8	+8·0	+11·6	−4·3	−3·3	0·0	+0·1	+1·4	−17·2	−8·3	−2·2	+1·8	+0·1	0·0	+0·4
July	+22·5	−15·9	−20·6	+1·4	+1·0	0·0	+0·4	+1·6	−4·4	−29·4	+5·0	+12·9	−3·6	−4·8	−1·1	+1·0	+5·0	−12·6	−10·5	−2·9	+1·8	+0·3	0·0	−0·1
Aug.	+24·5	−13·1	−18·5	+4·6	+1·0	−3·1	−1·0	+2·4	−9·6	−25·5	+6·2	+13·2	−3·9	−7·6	+0·7	+1·9	−3·9	−21·8	−12·3	−0·6	+3·9	+0·6	−0·4	−2·0
Sept.	+19·5	−12·7	−20·5	+8·5	+3·6	0·0	−0·2	+0·1	−17·1	−19·3	+2·7	+12·8	−4·9	−7·0	+2·8	−1·0	−11·5	−27·1	−13·5	−0·3	+2·3	+3·4	−0·5	−0·6
Oct.	+20·2	−2·1	−15·6	+2·7	+5·4	−2·6	−1·7	−0·7	−15·0	−12·1	−1·9	+10·7	−3·7	−6·0	+3·6	+2·8	−8·6	−20·7	−8·5	−2·0	+1·9	+1·2	−2·0	−0·2
Nov.	+9·9	+2·7	−8·2	−0·9	+1·0	−1·0	−0·8	+0·5	−10·3	−8·0	−1·6	+6·9	−2·2	−2·8	+0·9	+2·6	−3·2	−10·6	−4·8	−0·1	+0·4	−0·3	−1·7	−0·1
Dec.	+7·7	+5·5	−4·8	−2·6	+1·1	−1·7	−0·3	0·0	−10·4	−4·0	−2·8	+5·5	−1·5	−1·7	+0·4	+1·8	+1·3	−8·6	−2·5	−0·9	+1·0	+0·7	−0·1	0·0
Year	+17·5	−5·4	−14·7	+1·5	+2·7	−1·2	−0·3	+0·9	−9·8	−17·0	+1·9	+10·5	−3·1	−5·1	+1·1	+1·5	−1·6	−15·7	−7·9	−1·3	+2·0	+1·0	−0·8	−0·1
Winter	+10·1	+3·9	−7·7	−1·5	+2·5	−1·4	−1·0	+0·6	−9·1	−7·4	−2·3	+6·7	−1·3	−2·9	+0·9	+2·2	−0·3	−9·6	−3·0	−0·9	+1·0	+0·5	−0·9	−0·1
Equinox	+18·8	−5·7	−18·1	+3·8	+4·5	−1·2	−0·5	+0·8	−13·9	−16·8	+0·4	+12·4	−3·6	−7·4	+2·5	+1·5	−6·7	−21·5	−10·3	−1·3	+2·2	+2·3	−1·1	−0·3
Summer	+23·4	−14·5	−18·3	+2·1	+1·2	−1·1	+0·5	+1·3	−6·6	−26·9	+7·6	+12·5	−4·3	−4·8	0·0	+0·8	+2·2	−15·8	−10·5	−1·5	+2·7	+0·1	−0·2	0·0
												QUIET DAYS												
Year	+18·2	−2·1	−11·0	+0·2	+2·5	−1·3	−0·6	+1·0	−3·3	−17·3	+4·0	+10·1	−3·7	−4·5	+0·9	+1·7	+5·1	−1·5	−4·6	−0·8	+1·8	0·0	−0·7	−0·2
Winter	+9·1	+2·2	−6·3	−1·2	+2·4	−0·8	−0·9	+1·1	−2·2	−7·8	−1·1	+5·3	−2·0	−2·8	+0·7	+1·6	+1·9	−1·5	−1·4	−0·5	+0·8	−0·1	−0·7	+0·1
Equinox	+21·8	−1·3	−12·6	+0·1	+3·7	−2·0	−0·7	+1·8	−4·3	−17·7	+3·2	+11·4	−4·9	−5·9	+2·0	+2·4	+5·3	−1·0	−4·1	−1·6	+2·3	+0·5	−1·2	−0·5
Summer	+23·7	−7·0	−14·2	+1·8	+1·6	−1·0	−0·3	+0·3	−3·2	−26·4	+9·9	+13·6	−4·2	−4·8	+0·1	+1·1	+8·2	−2·0	−8·4	−0·4	+2·2	−0·4	−0·3	−0·2
												DISTURBED DAYS												
Year	+11·5	−14·4	−22·8	+5·8	+1·0	−1·2	−1·3	+0·9	−20·9	−20·5	−1·9	+11·8	−1·9	−5·2	+2·2	+1·2	−15·6	−43·1	−15·3	+0·9	+2·4	+2·3	−0·8	+0·2
Winter	+7·7	+5·9	−11·1	+0·8	+1·3	−2·1	−3·4	+0·3	−21·9	−6·9	−3·9	+11·0	+0·9	−3·9	+1·6	+2·3	−8·3	−30·2	−9·7	+0·7	+1·1	+2·4	−1·4	+0·2
Equinox	+4·6	−24·1	−31·2	+15·7	+6·3	+0·5	−2·2	−3·5	−34·3	−22·2	−6·9	+13·1	−1·2	−7·2	+3·7	−0·3	−27·7	−62·8	−23·8	+5·8	+1·6	+6·5	0·0	+0·4
Summer	+22·1	−24·9	−26·2	+1·0	−4·7	−2·1	+1·8	+6·0	−6·4	−32·3	+5·2	+11·2	−5·5	−4·7	+1·4	+1·5	−10·8	−36·2	−12·4	−4·0	+4·4	−2·1	−0·9	−0·1

HARMONIC COMPONENTS OF THE DIURNAL INEQUALITY OF MAGNETIC FORCE

Values of c_n, α_n in the series $\Sigma c_n \sin(15nt + \alpha_n)$, t being mean local time, reckoned in hours from midnight

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	North component								West component								Vertical component							
	c_1	α_1	c_2	α_2	c_3	α_3	c_4	α_4	c_1	α_1	c_2	α_2	c_3	α_3	c_4	α_4	c_1	α_1	c_2	α_2	c_3	α_3	c_4	α_4
	γ	°	γ	°	γ	°	γ	°	γ	°	γ	°	γ	°	γ	°	γ	°	γ	°	γ	°	γ	°
												ALL DAYS												
Jan.	8·5	78	6·4	279	3·4	133	1·3	333	9·7	232	6·1	344	2·1	207	1·6	45	9·2	177	1·3	227	1·0	31	0·7	302
Feb.	15·4	73	11·9	263	5·1	112	2·1	309	14·1	219	9·2	350	5·4	200	3·1	38	10·1	186	4·2	252	2·3	86	1·3	257
Mar.	13·4	109	19·0	289	3·3	123	0·9	16	21·7	227	11·5	1	9·3	200	3·1	72	30·0	203	10·3	264	3·8	65	1·4	249
Apr.	23·2	104	17·7	276	6·1	107	2·9	9	21·6	206	14·9	14	8·6	218	2·7	37	10·7	166	8·9	271	3·0	35	1·1	309
May	27·1	123	17·6	281	2·8	101	1·2	98	24·7	197	16·5	49	6·5	246	0·3	100	13·3	156	10·9	273	3·5	110	1·7	359
June	27·8	127	16·4	280	1·0	202	1·9	65	29·5	196	14·1	41	5·4	242	0·2	29	17·2	178	8·6	262	1·8	96	0·4	12
July	27·5	129	20·6	280	1·0	102	1·7	26	29·7	192	13·8	27	6·0	227	1·5	326	13·6	161	10·8	261	1·8	89	0·1	215
Aug.	27·7	121	19·1	290	3·2	172	2·6	351	27·3	204	14·6	32	8·6	217	2·0	32	22·1	193	12·3	274	3·9	91	2·1	205
Sept.	23·3	126	22·2	299	3·6	100	0·2	302	25·8	225	13·1	18	8·6	225	3·0	123	29·5	206	13·5	275	4·1	44	0·8	235
Oct.	20·3	99	15·8	286	6·0	126	1·9	262	19·2	234	10·9	356	7·1	221	4·5	65	22·4	206	8·7	263	2·2	69	2·0	276
Nov.	10·3	78	8·2	270	1·4	144	1·0	315	13·0	235	7·1	354	3·6	228	2·7	33	11·1	200	4·8	276	0·5	137	1·7	281
Dec.	9·5	58	5·4	247	2·0	158	0·3	278	11·2	252	6·2	340	2·3	231	1·9	25	8·7	174	2·7	257	1·2	65	0·1	269
Year	18·3	110	14·7	282	3·0	123	1·0	354	19·6	213	10·7	17	5·9	221	1·8	50	15·8	189	8·0	267	2·2	73	0·8	272
Winter	10·8	72	7·9	266	2·9	129	1·1	314	11·7	234	7·1	347	3·2	214	2·3	35	9·6	185	3·1	259	1·1	75	0·9	277
Equinox	19·7	110	18·5	288	4·7	115	0·9	340	21·8	223	12·4	8	8·3	215	2·9	72	22·6	201	10·3	269	3·2	52	1·2	270
Summer	27·5	125	18·4	283	1·6	142	1·4	34	27·7	197	14·6	38	6·4	231	0·8	11	16·0	175	10·6	268	2·7	97	0·2	276
												QUIET DAYS												
Year	18·3	100	11·0	277	2·9	127	1·2	342	17·6	194	10·9	28	5·8	229	1·9	41	5·3	109	4·7	266	1·8	100	0·7	266
Winter	9·3	80	6·4	265	2·5	119	1·4	333	8·1	199	5·5	355	3·5	225	1·8	38	2·4	131	1·5	257	0·8	107	0·7	287
Equinox	21·8	97	12·6	277	4·2	128	1·9	351	18·2	197	11·8	22	7·7	229	3·1	52	5·4	104	4·4	255	2·4	89	1·3	262
Summer	24·7	110	14·3	284	1·9	132	0·4	323	26·6	190	16·8	42	6·4	231	1·1	17	8·4	107	8·4	274	2·3	111	0·3	246
												DISTURBED DAYS												
Year	18·4	145	23·5	291	1·5	150	1·6	317	29·2	229	11·9	357	5·6	210	2·5	75	45·8	203	15·3	280	3·3	56	0·8	296
Winter	9·6	56	11·1	281	2·5	157	3·4	287	23·0	256	11·7	347	4·0	177	2·8	48	31·3	199	9·7	280	2·7	35	1·4	291
Equinox	24·6	172	35·0	303	6·3	95	4·2	225	40·9	240	14·9	339	7·3	199	3·7	108	68·7	207	24·5	290	6·7	24	0·4	18
Summer	33·3	142	26·2	279	5·1	255	6·3	29	32·9	194	12·3	31	7·2	240	2·1	55	37·8	200	13·0	259	4·9	125	0·9	276

KEW

KEW OBSERVATORY

Latitude	51°28′N.
Longitude	0°19′W.
G.M.T. of Local Mean Noon	12h. 1m.

Heights of instruments	above M.S.L.	above ground
	m.	m.
Barometer	10·4	..
Thermometer bulbs	..	3·0
Rain-gauge site	5·5	..
Tilting-siphon rain recorder rim	..	0·53
Sunshine recorder	..	13·3
Pressure-tube anemograph	28	23

INTRODUCTION

Full details of the site, instruments, procedure and tabulation are given in the *Observatories' Year Book, 1938*. Changes and additions only are mentioned here.

Meteorology

Notes on the instruments

Pressure.– The photographic barograph is mounted in the galvanometer room of the underground seismograph house. It was transferred there on 15 May 1939 from the position in the north room of the basement of the main Observatory building which it had occupied since the inception of the record in 1862.

Temperature.– As from January 1943, Kew adopted the practice followed by the other Observatories for the tabulation of hourly readings of temperature from the curves of the photo-thermograph i.e. by adjusting the glass scale, so that the readings at the control hours on the trace are made to show general agreement with the corresponding eye readings of the standard control thermometers, and then reading off the temperature equivalent from the curves at the requisite times. This supersedes method *(a)* set out on page 3 of the General Introduction to the *Observatories' Year Book, 1938*.

Rainfall.– On and after 1 October 1944 the hourly readings are from a Meteorological Office tilting-siphon recorder, M.O.80, instead of from the old Beckley self-registering rain-gauge No. 1 which had been continuously in operation at Kew Observatory since 1871. The new instrument, whose funnel also has a collecting area of approximately 100 square inches, is set up 8·5 metres south-south-west of the standard check-gauge with the rim at exactly the same height above ground level as was the old Beckley gauge, i.e. 0·53 metres. From 1 January 1945 onwards the hourly readings are adjusted to give totals in agreement with the check gauge read daily at 9h. and 21h. Prior to 1 August 1944 the check gauge was read at 7h. and 18h., from 1 August to 31 December 1944 at 6h. and 18h. A special instrument, known as the rainfall chronograph, which in effect is a sensitive drop-counting gauge, is used to help in determining the duration of rainfall of 0·1 mm. per hour or more. This gauge stands on the lawn about 6·5 metres west-north-west of the tilting-siphon recorder. The Jardi rate-of-rainfall recorder has proved to be unreliable at rates below 6 mm. per hour and such values are omitted from Table 182.

Solar radiation.– The tabulations of the radiation received on a surface perpendicular to the solar beam (Tables 186 and 188) were made on the assumption that the thermopile of the Gorczynski pyrheliograph had maintained its sensitivity. Subsequent investigation indicated that a progressive decrease in sensitivity had occurred and that all tabulations needed correction from 1938 onwards until April 1945 when the thermopile was repaired and readjusted*. The factors by which the printed values should be multiplied are given in the Introductions for the years in question.

Minimum temperature on the grass.– From 1 January 1945 onwards the thermometer was set at 21h. and read at 9h. and the printed values refer to the period 21h. on the previous day to 9h. on the day of entry.

Identification numbers of instruments in use in 1947

Thermometers Nos. 788 and 738 continued in use as the control dry-bulb and wet-bulb thermometers respectively. Rain measure No. 1846 was used as the measuring glass for the control rain-gauge throughout the year. Grass minimum thermometer M.O. 18011, which had been in continuous use since 1934, was broken on 1 November. Thermometer M.O. 18013 has been used as a replacement.

Thermometer corrections 1947

	No. 788 N.P.L. 1933		No. 738 N.P.L. 1938		M.O.5. N.P.L. 1913		M.O.10 N.P.L. 1913		M.O.18011 N.P.L. 1929		M.O.18013 N.P.L. 1929	
	°F.		°F.		°A.		°A.		°F.		°F.	
Certified	2	+0·1	2	+0·2	250	+0·1	250	+0·3	2	0·0	2	0·0
	12	+0·1	12	+0·1	273	0·0	273	+0·1	22	0·0	22	0·0
	32	0·0	32	0·0	280	0·0	280	+0·2	32	0·0	32	0·0
	52	−0·1	52	−0·1	290	0·0	290	+0·1	52	0·0	52	0·0
	72	0·0	72	−0·1	300	0·0	300	0·0	72	0·0	72	0·0
	92	0·0	92	−0·2	310	0·0	316	+0·1	..	..	..	..
Applied		0·0		0·0		0·0		+0·1		0·0		0·0

Notes on the Meteorological Summaries

From a meteorological standpoint the year 1947 was memorable. An exceptional wintry spell from late January to mid March gave 21 "ice days", i.e. days with a maximum temperature in the screen of 273·0°A. (32·0°F.) or less. 13 of these occurred in February which had a mean temperature 10°F. below the average for the period 1871–1915. The lowest temperature recorded in the north-wall screen was 263·3°A. (14·5°F.) at 07h. 50m. on 24 February, whilst the lowest reading of the grass minimum thermometer was 256·9°A. (3·0°F.) on 29 January. However the mean temperature for the year 1947, 283·5°A. (51·0°F.), was above the average of 282·8°A. (49·6°F.) for the period 1871–1915. This was due to the mildness of the rest of the year, all the months April to September having mean temperatures more than 3°F. above average. August was exceptionally warm with a mean temperature of 292·8°A. (67·6°F.), over 6°F. above average. There were 21 days on which the maximum temperature in the north-wall screen exceeded 300°A. (80·6°F.) and 9 of these occurred in August. The highest reading was 305·7°A. (90·9°F.) registered at 14h. 50m. on 3 June.

Despite a rainfall total for March of 118 mm., nearly 3 times the average, and for June of 81 mm., 1½ times the average, the rainfall for the year 1947, 502 mm., was nevertheless 17 per cent below the average for the standard period 1881–1915. This was because July to November were all dry months, indeed the October total of 4 mm. represents the driest October at Kew since records began in 1856. The total of 80 mm. for the four months July to October 1947 is the lowest on record being only about one-third of the average. During the same four months of 1921, a notorious dry year, Kew recorded a total of 85 mm. The heaviest fall in one day was 17 mm. on 29 March.

* *STAGG, J.M.:* Solar radiation at Kew Observatory. *Geophys. Mem., London*, **11**, No. 86, 1950.

The sunshine for the year, 1524 hours, was 55 hours more than the normal for the period 1906–1935 and August 1947, with a total of 279 hours, was the sunniest August since records commenced in 1881.

During 1947 the highest wind speed recorded in a gust was 32·8 m./sec. (73·4 m.p.h.) at 19h. 40m. on 16 March. This is the highest gust ever recorded at Kew. The previous highest was 32·6 m./sec. (72·9 m.p.h.) on 23 November 1938.

TABLE 172 - DIURNAL VARIATION OF BAROMETRIC PRESSURE FOURIER COEFFICIENTS

Values of c_n, α_n in the series $\sum c_n \sin(15nt. + \alpha_n)$, t being local mean time reckoned in hours from midnight

	c_1		α_1		c_2		α_2		c_3		α_3		c_4		α_4	
	1947	1871-1926	1947	1871-1926	1947	1871-1926	1947	1871-1926	1947	1871-1926	1947	1871-1926	1947	1871-1926	1947	1871-1926
	mb.	mb.	°	°	mb.	mb.	°	°	mb.	mb.	°	°	mb.	mb.	°	°
January	0·21	0·02	309	315	0·26	0·31	154	151	0·18	0·17	4	346	0·09	0·07	238	202
February	0·24	0·05	101	73	0·25	0·36	152	146	0·11	0·12	355	340	0·02	0·03	31	108
March	0·08	0·11	92	38	0·35	0·40	158	149	0·03	0·07	45	332	0·07	0·04	25	25
April	0·51	0·28	344	31	0·40	0·40	152	151	0·05	0·03	112	185	0·04	0·04	334	353
May	0·21	0·32	40	27	0·34	0·35	156	148	0·10	0·09	157	161	0·03	0·02	337	319
June	0·19	0·30	36	17	0·27	0·32	144	143	0·14	0·09	157	160	0·03	0·01	307	260
July	0·15	0·26	21	16	0·32	0·31	148	140	0·11	0·10	137	153	0·03	0·01	312	281
August	0·53	0·21	16	20	0·43	0·34	145	144	0·10	0·06	152	155	0·04	0·04	308	309
September	0·33	0·12	30	6	0·43	0·40	159	152	0·01	0·01	93	350	0·07	0·04	328	332
October	0·22	0·06	28	76	0·44	0·38	157	160	0·11	0·09	21	359	0·01	0·01	96	22
November	0·17	0·03	129	124	0·37	0·34	163	160	0·07	0·13	4	358	0·02	0·03	264	183
December	0·23	0·08	125	137	0·29	0·31	146	152	0·16	0·15	3	353	0·10	0·07	197	205
Arithmetic mean	0·26	0·15	-	-	0·35	0·35	-	-	0·10	0·09	-	-	0·05	0·03	-	-
Year	0·17	0·14	30	29	0·34	0·35	153	150	0·04	0·03	57	359	0·02	0·01	299	280
Winter	0·11	0·03	111	111	0·29	0·33	154	152	0·13	0·14	2	350	0·04	0·05	220	208
Equinox	0·25	0·14	12	32	0·40	0·39	156	153	0·04	0·04	53	345	0·04	0·03	350	359
Summer	0·27	0·27	25	20	0·34	0·33	148	144	0·11	0·08	151	157	0·03	0·02	315	305

TABLE 173 - DIURNAL VARIATION OF TEMPERATURE FOURIER COEFFICIENTS

Values of c_n, α_n in the series $\sum c_n \sin(15nt + \alpha_n)$, t being local mean time reckoned in hours from midnight

	c_1		α_1		c_2		α_2		c_3		α_3		c_4		α_4	
	1947	1871-1926	1947	1871-1926	1947	1871-1926	1947	1871-1926	1947	1871-1926	1947	1871-1926	1947	1871-1926	1947	1871-1926
	°A.	°A.	°	°	°A.	°A.	°	°	°A.	°A.	°	°	°A.	°A.	°	°
January	1·03	0·99	213	221	0·37	0·43	44	35	0·16	0·17	202	208	0·05	0·04	46	3
February	0·73	1·53	218	221	0·28	0·57	35	34	0·06	0·12	248	211	0·03	0·06	176	169
March	1·42	2·45	223	222	0·53	0·63	45	40	0·06	0·07	303	334	0·07	0·10	212	197
April	2·97	3·21	223	226	0·40	0·48	56	51	0·23	0·22	35	24	0·08	0·08	224	218
May	3·67	3·72	228	227	0·06	0·15	81	74	0·38	0·31	47	35	0·07	0·05	344	20
June	3·43	3·72	227	226	0·20	0·02	210	84	0·32	0·26	26	35	0·16	0·12	46	33
July	3·18	3·68	223	225	0·13	0·06	11	50	0·20	0·29	7	31	0·08	0·09	26	28
August	4·58	3·54	222	226	0·56	0·34	36	52	0·33	0·30	21	28	0·09	0·03	153	218
September	3·32	3·22	226	228	0·63	0·71	51	49	0·27	0·14	23	24	0·12	0·13	200	213
October	3·04	2·32	223	229	0·77	0·76	38	50	0·14	0·10	178	248	0·12	0·12	231	200
November	1·44	1·39	226	226	0·48	0·57	40	44	0·16	0·18	243	232	0·01	0·01	37	141
December	0·69	0·90	241	226	0·34	0·40	20	41	0·16	0·16	260	215	0·01	0·02	365	38
Arithmetic mean	2·46	2·56	-	-	0·40	0·43	-	-	0·21	0·19	-	-	0·07	0·07	-	-
Year	2·45	2·56	224	226	0·36	0·42	42	45	0·12	0·08	26	17	0·01	0·02	186	195
Winter	0·96	1·20	224	223	0·36	0·49	35	39	0·13	0·15	236	217	0·01	0·02	85	121
Equinox	2·68	2·80	224	226	0·58	0·64	47	47	0·09	0·09	31	4	0·10	0·10	217	207
Summer	3·71	3·67	225	226	0·13	0·14	37	59	0·30	0·29	28	32	0·06	0·06	49	27

"Winter" comprises the four months January, February, November, December; "Equinox" the months March, April, September, October; and "Summer" May to August.

Atmospheric electricity

No change took place during 1947 in the method and procedures for observing potential gradient, air-earth current and conductivity, from those printed in the Introduction for 1938. Details of the changes of position of the Kelvin electrograph in April 1940 and of the effects on the instrument of the erection of a fire escape in March 1941 are printed in the Introduction for the years in question.

In 1947 the mean value of the air-earth current for the year, allowing equal weight for each month, was 93×10^{-18} amp. cm. $^{-2}$. The mean value of the conductivity for the year was 39×10^{-18} ohm $^{-1}$ cm. $^{-1}$.

The mean factor for the year for the Kelvin electrograph was 4·06 giving an equivalent height for the collector of 24·6 cm. In 1947 there were 178, 141 and 46 days of electrical character 0, 1, 2 respectively. The extreme of hourly values of potential gradient in Table 196 are 2070 volts per metre at 9h. on 1 December and -1225 volts per metre at 3h. on 8 December.

During the following months there were not 10 "quiet" calendar days.

1947	*Calendar days*	*Other spells*	*Total*
March	5	2	7
December	5	2	7

The *Observatories' Year Book, 1938* should be consulted for an explanation of the figures in the foregoing paragraphs.

Atmospheric pollution

During 1947 the highest estimate of pollution was 1·9 mg. m.$^{-3}$, this value occurring on 1 December at 15h. There were 8 days on which the pollution reached 1·0 mg. m.$^{-3}$. The number of hours credited with 1·0 mg. m.$^{-3}$ was 25 of which 10 were recorded during December.

Seismology

The seismological diary and table of microseisms, which were printed in the *Observatories' Year Book* from 1922 to 1939 are now omitted. The distribution of the *Kew Monthly Bulletin* which ceased in May 1940 was resumed in January 1947. Seismological data for 1947 are also published in the *International Seismological Summary*.

No change took place in instruments or procedures from those printed in the Introduction for 1938 and 1939 except that the two modified Wood-Anderson seismographs, put out of commission in May 1942, were overhauled and put back into operation for the big Heligoland explosion of 18 April 1947. This was registered on both instruments as well as on the short-period vertical seismograph but not on any of the three Galitzin instruments. On 28 July the explosion of nitrate in Brest Harbour was well recorded on the S.P.V. instrument. The Galitzin seismographs were not standardized during 1947.

The total number of shocks measured during the year was 300. The phases of 96 of these were sufficiently well defined to allow an estimate of the epicentral distance to be computed.

No British earthquakes were recorded during 1947.

Maximum, minimum and daily mean values in millibars for each day 0h. to 24h., G.M.T.
The initial 9 or 10 of the values is omitted, i.e. 1005·6 is printed 05·6

174 KEW OBSERVATORY: h_b(height of barometer cistern above M.S.L. = 10·4 m.

	JANUARY			FEBRUARY			MARCH			APRIL			MAY			JUNE		
	Max.	Min.	Mean	Max.	Min.	Mean	Max.	Min.	Mean	Max.	Min.	Mean	Max.	Min.	Mean	Max.	Min.	Mean
	millibars																	
1	17·6	11·2	15·2	06·7	03·4	05·7	12·3	05·2	09·0	98·0	95·2	*96·4*	19·6	14·1	16·9	14·0	12·1	13·2
2	21·3	10·0	17·3	03·4	89·7	95·2	16·4	12·3	14·4	02·9	97·7	99·6	19·0	05·2	11·9	12·6	09·7	11·0
3	21·7	18·7	20·0	89·7	*78·1*	*81·7*	16·7	14·5	15·4	03·1	89·9	99·1	09·1	*02·4*	06·7	10·4	03·9	07·9
4	21·9	15·9	19·5	99·5	80·1	89·1	15·1	99·1	07·1	18·2	*87·9*	00·8	12·9	07·0	09·3	04·3	00·7	02·8
5	15·9	03·8	09·2	11·4	99·5	06·3	99·3	92·2	94·9	21·5	08·0	17·0	16·1	12·9	14·1	02·8	98·7	*00·6*
6	08·6	03·3	0?·5	12·9	11·1	12·0	04·8	92·8	98·5	11·9	08·1	10·0	18·9	15·4	17·3	10·1	99·3	03·2
7	09·2	06·2	07·9	11·8	02·8	07·7	11·9	04·8	08·7	17·2	11·9	15·0	18·1	12·2	15·6	15·6	09·1	11·4
8	09·4	98·2	05·0	02·8	94·7	97·3	16·4	11·0	12·7	17·5	05·2	10·0	15·7	09·7	12·6	16·0	14·2	15·2
9	13·4	99·5	06·1	01·4	96·7	98·9	19·9	12·0	17·6	37·4	17·5	29·2	15·6	06·5	10·5	28·5	15·6	22·4
10	16·5	03·0	12·4	06·7	01·1	03·8	12·0	90·3	00·9	*39·1*	35·9	*37·5*	16·2	09·2	12·6	*29·4*	24·0	*27·0*
11	03·0	94·2	98·9	12·5	06·6	10·0	14·5	88·8	01·7	36·8	30·9	33·9	18·3	15·9	17·4	24·1	16·8	19·9
12	03·9	94·1	99·3	13·5	11·9	12·7	17·6	05·4	14·1	32·9	30·6	31·9	18·3	14·9	16·5	17·9	13·9	15·7
13	05·4	*90·8*	*95·2*	13·9	12·2	13·0	05·4	86·2	92·9	32·5	24·7	28·3	15·2	08·2	11·7	14·4	09·1	12·0
14	10·9	02·7	05·9	18·7	13·7	15·8	17·6	86·4	00·7	27·2	23·5	24·7	10·4	03·7	06·3	09·1	94·7	00·7
15	16·0	10·8	13·3	*24·4*	18·6	21·6	*21·3*	10·4	*17·7*	28·1	26·6	27·4	15·1	10·3	13·2	15·3	*94·6*	03·1
16	16·1	12·1	14·3	24·3	20·5	*22·6*	10·4	89·1	99·1	27·3	19·4	22·9	16·3	14·7	15·7	20·8	15·3	18·9
17	29·3	13·0	22·2	20·5	12·4	16·1	08·7	00·1	05·3	22·7	18·7	20·5	15·8	10·9	13·2	20·6	15·2	18·3
18	31·7	29·2	30·6	12·4	10·6	11·3	00·3	96·1	98·8	22·4	13·5	17·2	14·3	09·8	11·2	16·3	14·0	15·0
19	30·9	26·4	29·2	13·2	11·0	12·2	96·1	89·0	91·6	15·5	13·0	13·9	20·9	14·1	17·2	17·0	15·1	16·0
20	26·6	22·8	24·2	11·0	01·8	07·0	01·0	91·4	97·9	15·3	05·3	09·8	25·2	20·9	23·0	15·8	11·9	13·2
21	26·0	23·9	24·9	01·8	91·3	95·0	99·8	89·7	93·5	13·9	08·0	11·6	*26·0*	24·6	*25·4*	15·5	12·3	13·5
22	28·1	24·7	26·2	05·6	93·3	98·8	94·8	87·8	90·8	09·6	03·6	06·0	25·0	15·3	20·6	21·1	15·5	18·5
23	31·8	27·6	29·2	17·8	05·6	12·7	90·3	85·8	88·0	10·4	96·7	04·0	15·3	06·8	10·0	20·8	18·4	19·4
24	*33·7*	29·4	*31·9*	18·0	13·5	15·6	11·3	89·5	97·2	24·8	04·2	16·9	06·9	04·3	*05·8*	18·7	09·5	14·1
25	29·4	14·8	22·6	14·7	13·1	13·9	16·1	11·3	14·4	24·8	13·3	19·1	12·5	06·0	10·1	16·4	09·3	13·3
26	16·4	13·0	14·4	13·3	04·5	08·1	12·3	03·4	06·9	26·8	16·8	24·4	15·4	10·3	11·9	16·4	12·9	14·6
27	20·3	16·4	19·0	04·6	97·1	00·1	03·4	97·8	99·9	25·0	14·6	19·2	21·3	15·4	19·1	19·9	13·9	16·7
28	19·5	11·9	15·2	05·2	96·1	99·4	98·3	90·8	95·3	21·1	14·1	16·2	21·9	18·6	20·2	19·4	13·4	17·0
29	15·9	13·7	14·8				90·8	*80·2*	*83·2*	23·3	03·6	16·9	19·3	17·5	18·3	23·3	15·9	19·7
30	13·8	05·5	08·5				91·0	80·8	85·8	14·1	02·2	08·3	19·2	15·4	17·3	24·1	21·6	22·9
31	06·3	04·3	05·3				95·4	89·7	91·8				15·9	11·9	13·7			
Mean	18·40	11·33	14·94	10·42	03·25	06·35	07·14	96·25	01·48	20·71	11·35	16·26	17·09	11·75	14·37	17·02	11·02	13·91

	JULY			AUGUST			SEPTEMBER			OCTOBER			NOVEMBER			DECEMBER		
	Max.	Min.	Mean	Max.	Min.	Mean	Max.	Min.	Mean	Max.	Min.	Mean	Max.	Min.	Mean	Max.	Min.	Mean
	millibars																	
1	23·2	21·7	22·4	21·5	17·4	20·1	19·0	16·3	17·9	30·7	24·2	27·0	17·8	15·3	16·9	99·6	95·7	97·8
2	22·0	18·2	20·0	19·8	14·4	16·6	20·6	18·2	19·2	28·5	23·9	25·6	16·0	99·3	06·7	95·7	94·1	95·0
3	18·8	15·9	17·4	17·7	13·3	16·1	20·4	15·5	17·7	31·1	28·5	30·0	12·5	04·5	09·1	94·5	88·7	91·1
4	16·5	06·4	12·6	13·3	04·9	08·2	16·5	14·2	15·4	30·8	25·5	28·5	17·6	12·7	15·9	94·0	88·1	91·1
5	12·2	03·9	07·9	09·2	*03·0*	*05·3*	17·7	15·5	16·5	25·5	18·2	21·2	28·0	17·4	23·4	90·5	*76·9*	*83·3*
6	12·5	06·5	10·4	15·7	09·2	12·1	19·4	17·6	18·3	19·2	16·9	18·1	*28·5*	26·8	*27·6*	00·6	87·9	92·1
7	06·5	01·9	03·5	19·1	15·7	17·7	18·2	13·2	16·0	18·4	15·0	16·8	27·1	23·5	25·3	13·3	00·6	08·9
8	03·8	98·3	00·2	19·1	15·7	17·7	14·5	10·0	11·7	18·0	14·2	15·5	23·9	17·5	21·4	16·7	06·0	09·7
9	03·5	*96·8*	*99·3*	16·4	13·4	14·8	15·4	13·1	14·4	21·5	17·7	19·6	17·5	07·1	12·4	32·9	16·7	25·9
10	03·7	99·6	02·0	18·7	14·7	16·4	18·5	15·3	17·5	28·2	21·5	24·4	17·5	03·4	11·9	37·2	32·7	35·3
11	12·4	02·4	06·6	22·1	18·7	20·4	18·1	12·6	14·7	*31·5*	28·2	*30·3*	16·7	06·1	10·4	36·7	33·0	35·3
12	22·0	12·4	18·1	23·5	20·3	21·9	16·3	14·4	15·4	*31·5*	26·7	29·6	06·1	97·9	01·3	33·0	29·8	31·2
13	24·5	22·0	*23·7*	22·3	20·4	21·4	14·9	11·2	13·0	26·7	22·8	24·7	12·6	05·1	09·3	33·0	30·8	32·0
14	*25·0*	20·9	23·1	22·7	19·3	21·2	14·8	11·5	13·0	22·7	19·7	20·9	14·1	05·4	11·5	35·5	32·8	33·8
15	20·9	13·2	16·4	20·9	17·8	19·6	16·5	10·4	14·3	22·7	19·6	21·1	14·4	04·3	08·2	*37·5*	35·2	*36·4*
16	13·5	10·3	11·7	21·7	19·4	20·3	17·8	*06·8*	*10·5*	25·2	20·3	22·9	17·8	14·4	16·6	36·3	33·6	35·2
17	15·3	13·4	14·6	22·0	19·1	20·7	21·3	17·8	19·7	27·0	23·7	24·9	16·2	09·5	13·9	34·7	29·6	32·8
18	14·9	11·0	12·8	20·7	16·1	18·3	20·8	14·4	16·5	30·2	27·0	28·8	09·5	03·1	05·8	29·6	27·2	28·2
19	11·4	08·1	09·4	18·8	16·0	16·8	14·6	09·8	11·9	31·0	28·2	29·6	15·6	00·3	06·9	29·6	26·0	28·1
20	12·8	09·5	11·1	20·1	16·1	18·2	16·9	09·6	12·8	28·2	20·3	24·0	20·2	14·9	17·3	33·1	27·0	29·3
21	12·8	11·3	12·1	17·7	13·2	14·9	34·0	16·9	24·4	20·3	13·5	18·1	21·9	19·6	20·5	33·6	26·8	30·5
22	19·6	12·6	16·6	18·3	13·7	15·3	*34·5*	17·6	28·9	13·5	07·9	09·5	20·8	15·9	18·7	26·8	24·6	25·1
23	20·0	18·2	19·3	23·2	18·1	20·1	18·4	16·3	17·6	15·4	07·4	11·0	23·2	14·9	18·8	25·8	23·5	24·9
24	20·8	18·1	19·4	24·4	22·8	24·0	20·6	17·7	19·1	16·1	14·8	15·5	25·7	14·9	21·9	25·0	11·1	17·8
25	18·8	14·9	17·2	25·5	22·7	24·3	19·7	17·6	18·9	21·5	15·1	17·8	16·1	13·9	15·1	11·1	96·8	05·1
26	18·0	16·1	16·9	*26·9*	23·9	*25·6*	20·4	17·8	18·8	23·3	19·9	22·1	15·2	07·4	10·9	08·5	01·6	06·9
27	17·6	15·2	16·6	26·6	23·2	25·1	21·9	18·8	20·0	19·9	17·4	18·5	07·4	05·1	06·1	05·4	90·5	95·2
28	17·6	11·4	14·0	25·8	23·4	25·0	21·1	19·3	20·1	19·1	15·7	17·5	05·8	99·4	02·5	92·3	87·0	89·5
29	18·5	10·7	15·0	24·6	20·5	22·7	25·4	17·6	20·2	15·9	10·8	13·0	99·4	*95·2*	*96·8*	96·2	92·3	94·7
30	19·2	17·1	18·4	21·9	18·8	20·5	31·9	25·4	*29·9*	10·8	03·9	*07·0*	99·7	97·0	98·0	06·6	95·3	98·8
31	20·4	17·1	18·6	20·3	17·5	18·9				15·6	*03·5*	08·3				14·9	06·6	12·5
Mean	16·09	11·45	13·78	20·66	16·86	18·71	20·00	15·08	17·48	23·23	18·45	20·70	16·16	09·06	12·71	18·07	11·24	14·63
									Annual	17·12	10·64	13·84						

PRESSURE AT STATION LEVEL

Monthly and annual means of hourly values in millibars at exact hours, G.M.T.

175 KEW OBSERVATORY: h_b = 10·4 m.

	Hour G.M.T. 0	1	2	3	4	5	6	7	8	9	10	11	Noon	13	14	15	16	17	18	19	20	21	22	23	24	Mean
	millibars																									
Jan.	14·95	14·87	15·00	15·00	14·84	14·74	14·73	14·98	15·33	15·61	*15·64*	15·50	15·15	14·82	*14·67*	14·70	14·69	14·70	14·80	14·76	14·83	14·82	14·79	14·82	14·75	14·94
Feb.	06·92	06·82	06·76	06·56	06·34	06·30	06·27	06·37	06·57	06·64	06·60	06·62	06·51	06·27	*06·11*	06·14	06·19	06·35	06·63	06·79	06·84	06·89	06·91	*06·93*	06·92	06·56
Mar.	*01·93*	01·73	01·55	01·25	01·23	01·27	01·35	01·61	01·78	01·83	01·65	01·67	01·57	01·39	01·10	01·08	*01·03*	01·04	01·34	01·53	01·62	01·70	01·66	01·65	01·62	01·48
Apr.	16·09	15·93	15·88	15·97	15·94	16·04	16·43	16·76	16·91	*17·03*	16·94	16·74	16·52	16·30	16·04	15·75	15·65	*15·60*	15·69	15·86	16·19	16·39	16·50	16·62	16·71	16·26
May	14·69	14·50	14·35	14·21	14·19	14·25	14·55	14·62	14·69	14·71	14·55	14·45	14·32	14·25	14·07	13·90	13·87	*13·86*	13·92	14·17	14·48	14·71	*14·81*	14·78	14·65	14·37
June	14·00	13·92	13·78	13·62	13·62	13·78	13·93	14·05	14·10	14·12	13·96	13·92	13·91	13·83	13·80	13·68	13·57	*13·48*	13·53	13·68	13·98	14·37	14·41	*14·46*	14·33	13·91
July	14·13	13·94	13·70	13·53	13·57	13·68	13·85	14·02	14·14	*14·18*	14·01	13·97	13·82	13·67	13·60	13·56	13·40	*13·28*	13·32	13·53	13·79	14·03	14·08	14·11	14·06	13·78
Aug.	19·19	19·01	18·91	18·79	18·73	18·90	19·03	19·24	19·34	*19·35*	19·17	19·00	18·74	18·49	18·25	18·05	17·79	*17·70*	17·81	18·10	18·52	18·83	19·06	19·13	19·13	18·71
Sept.	17·58	17·48	17·45	17·26	17·14	17·29	17·53	17·68	17·92	17·96	17·84	17·65	17·43	17·20	17·05	16·83	*16·80*	16·85	17·06	17·41	17·81	17·98	18·02	*18·03*	17·99	17·48
Oct.	21·25	21·16	20·89	20·74	20·65	20·62	20·72	20·99	21·22	*21·36*	21·23	21·10	20·78	20·37	20·16	20·01	*19·97*	20·13	20·41	20·48	20·60	20·80	20·82	20·84	20·76	20·70
Nov.	*13·28*	12·95	12·86	12·64	12·50	12·51	12·46	12·74	12·92	13·04	12·98	12·93	12·65	12·46	12·26	*12·23*	12·32	12·41	12·62	12·83	12·91	13·01	12·96	12·82	12·75	12·71
Dec.	14·75	14·58	14·52	14·44	14·21	*14·07*	14·09	14·16	14·36	14·73	14·97	14·84	14·58	14·28	14·24	14·34	14·56	14·68	14·85	14·96	15·04	15·17	15·20	*15·28*	15·20	14·63
Annual	14·11	13·95	13·85	13·71	13·63	13·67	13·79	13·98	14·15	*14·26*	14·18	14·08	13·87	13·66	13·49	13·40	*13·36*	13·38	13·54	13·72	13·93	14·10	14·15	14·17	14·12	13·84

The initial 9 or 10 of the value is omitted, i.e. 1001·42 is printed 01·42.

PRESSURE REDUCED TO MEAN SEA LEVEL

Monthly and annual means of hourly values in millibars at exact hours, G.M.T.

176 KEW OBSERVATORY: h_b = 10·4 m.

	Hour G.M.T. 0	1	2	3	4	5	6	7	8	9	10	11	Noon	13	14	15	16	17	18	19	20	21	22	23	24	Mean
	millibars																									
Jan.	16·26	16·19	16·31	16·31	16·15	16·05	16·05	16·30	16·65	16·92	*16·95*	16·80	16·45	16·12	*15·97*	16·00	16·00	16·01	16·11	16·07	16·14	16·13	16·11	16·13	16·07	16·25
Feb.	08·24	08·14	08·08	07·88	07·66	07·62	07·59	07·69	07·89	07·96	07·91	07·93	07·82	07·59	*07·42*	07·45	07·50	07·66	07·94	08·10	08·15	08·21	08·23	*08·24*	08·23	07·87
Mar.	*03·21*	03·01	02·83	02·53	02·52	02·55	02·64	02·90	03·07	03·12	02·93	02·95	02·85	02·66	02·38	02·35	*02·31*	02·32	02·62	02·81	02·89	02·97	02·94	02·94	02·90	02·76
Apr.	17·38	17·22	17·17	17·26	17·23	17·33	17·72	18·05	18·20	*18·31*	18·22	18·01	17·79	17·57	17·31	17·01	16·92	*16·86*	16·95	17·13	17·46	17·67	17·78	17·90	17·99	17·56
May	15·96	15·77	15·61	15·48	15·46	15·53	15·81	15·89	15·95	15·97	15·79	15·69	15·56	15·49	15·31	15·14	15·10	*15·10*	15·17	15·42	15·73	15·97	*16·07*	16·03	15·92	15·62
June	15·26	15·19	15·03	14·88	14·88	15·04	15·18	15·30	15·35	15·36	15·20	15·16	15·15	15·06	15·03	14·91	14·80	*14·71*	14·76	14·91	15·22	15·62	15·67	*15·71*	15·58	15·15
July	15·38	15·19	15·01	14·78	14·82	14·93	15·09	15·26	15·38	*15·41*	15·25	15·20	15·04	14·90	14·82	14·79	14·62	*14·50*	14·57	14·76	15·02	15·27	15·32	15·36	15·31	15·02
Aug.	20·44	20·26	20·15	20·04	19·99	20·15	20·28	20·49	20·58	*20·59*	20·40	20·23	19·96	19·71	19·47	19·27	19·02	*18·92*	19·03	19·33	19·76	20·04	20·30	20·38	20·38	19·95
Sept.	18·84	18·74	18·71	18·52	18·41	18·55	18·79	18·94	19·17	19·21	19·09	18·79	18·67	18·44	18·29	18·06	*18·04*	18·09	18·31	18·66	19·06	19·23	19·27	*19·29*	19·25	18·73
Oct.	22·53	22·45	22·18	22·03	21·94	21·91	22·01	22·27	22·50	*22·64*	22·51	22·37	22·05	21·63	21·42	21·27	*21·23*	21·40	21·67	21·75	21·88	22·08	22·10	22·12	22·05	21·98
Nov.	*14·57*	14·23	14·14	13·93	13·79	13·79	13·75	14·03	14·20	14·33	14·26	14·20	13·93	13·73	13·53	*13·50*	13·58	13·67	13·90	14·11	14·20	14·30	14·25	14·10	14·03	13·99
Dec.	16·05	15·88	15·82	15·74	15·50	*15·36*	15·39	15·46	15·65	16·02	16·26	16·13	15·87	15·56	15·52	15·63	15·84	15·96	16·14	16·25	16·33	16·46	16·49	*16·58*	16·49	15·93
Annual	15·39	15·23	15·13	14·99	14·91	14·95	15·07	15·26	15·43	*15·53*	15·45	15·35	15·14	14·92	14·75	14·66	*14·63*	14·65	14·81	14·99	15·20	15·38	15·42	15·44	15·39	15·11

The initial 9 or 10 of the value is omitted, i.e. 1001·42 is printed 01·42

The monthly and annual values of pressure reduced to mean sea level are computed from the corresponding monthly and annual means of pressure at station level and of temperature. See General Introduction to the Meteorological Tables 1938.

TEMPERATURE

Monthly and annual means of readings in degrees Absolute at exact hours, G.M.T.

177 KEW OBSERVATORY: North-wall screen: h_t = 3·0 m.

	Hour G.M.T. 0	1	2	3	4	5	6	7	8	9	10	11	Noon	13	14	15	16	17	18	19	20	21	22	23	24	Mean
	degrees Absolute																									
Jan.	75·03	74·84	74·61	74·51	74·50	74·37	*74·36*	74·44	74·50	74·63	75·05	75·68	76·28	76·61	*76·73*	76·70	76·37	76·00	75·83	75·67	75·48	75·42	75·19	75·18	74·99	75·33
Feb.	71·75	71·75	71·65	71·59	71·51	71·50	71·43	*71·32*	71·36	71·73	72·05	72·43	72·71	72·84	*73·02*	72·99	72·84	72·65	72·43	72·20	72·05	71·96	71·85	71·72	71·65	72·05
Mar.	76·90	76·85	76·79	76·65	76·50	76·36	*76·15*	76·25	76·66	77·30	77·97	78·57	79·08	79·38	*79·61*	79·49	79·29	78·96	78·52	78·02	77·71	77·62	77·46	77·29	77·18	77·73
Apr.	80·79	80·51	80·07	79·94	79·52	*79·41*	79·64	80·46	81·34	82·41	83·30	84·12	84·62	85·09	85·49	*85·60*	85·49	85·27	84·49	83·51	82·73	82·18	81·74	81·17	80·78	82·46
May	84·52	84·17	83·75	83·52	*83·25*	83·35	84·25	85·42	86·69	87·65	88·47	89·08	89·67	90·13	90·66	*90·91*	90·83	90·59	90·01	89·04	87·68	86·73	86·01	85·45	84·89	87·17
June	87·55	87·12	86·71	86·44	*86·12*	86·65	87·56	88·45	89·47	90·33	91·10	91·85	92·16	92·54	92·76	93·00	*93·03*	92·80	92·75	92·13	90·56	89·41	88·56	87·94	87·44	89·86
July	89·24	88·95	88·67	88·43	*88·33*	88·36	88·88	89·51	90·42	91·27	92·12	92·87	93·57	94·16	94·48	*94·50*	94·49	94·35	94·05	93·35	92·07	91·19	90·44	89·81	89·33	91·40
Aug.	90·23	89·72	89·28	88·81	88·61	*88·38*	88·69	89·61	90·95	92·35	93·72	95·10	96·15	96·84	97·33	97·53	*97·63*	97·30	96·35	94·86	93·32	92·26	91·52	90·71	90·17	92·80
Sept.	87·42	87·02	86·69	86·42	86·11	*85·97*	85·99	86·59	87·83	89·08	90·23	91·17	91·74	92·28	92·59	*92·61*	92·46	92·00	91·09	89·93	88·94	88·30	87·80	87·42	87·11	89·07
Oct.	82·29	82·05	81·68	81·50	81·33	*81·27*	81·58	81·59	82·10	83·18	84·43	85·58	86·08	87·33	87·76	*87·82*	87·46	86·53	85·42	84·66	84·22	83·83	83·19	82·75	82·31	83·98
Nov.	80·25	80·11	80·13	79·99	79·86	79·92	79·83	*79·77*	79·88	80·46	81·14	81·75	82·35	82·72	*82·82*	82·67	82·23	81·74	81·45	81·10	80·78	80·52	80·23	79·98	79·86	80·90
Dec.	*78·21*	78·28	78·38	78·51	78·48	78·49	78·45	78·36	78·32	78·59	79·06	79·47	79·83	*80·05*	80·03	80·00	79·73	79·52	79·33	79·11	78·95	78·88	78·81	78·54	78·49	78·97
Annual	82·05	81·84	81·60	81·42	81·24	*81·23*	81·46	81·88	82·53	83·32	84·13	84·88	85·43	85·91	86·19	*86·24*	86·07	85·72	85·23	84·54	83·78	83·02	82·81	82·40	82·09	83·55

The initial 2 or 3 of the readings is omitted, i.e. 275·00 degrees Absolute is printed 75·00

Add 0·16° to obtain temperature in degrees Kelvin where $T(°K.) = t(°C.) + 273·16$

Maximum, minimum and daily mean values in degrees Absolute for each day 0h. to 24h., G.M.T.
The initial 2 or 3 of the values is omitted, i.e. 275·0° is printed 75·0°. Add 0·16° to obtain temperature in degrees Kelvin where $T(^{\circ}K.) = t(^{\circ}C.) + 273{\cdot}16$

178 KEW OBSERVATORY: North-wall screen: h_t(height of thermometer bulb above ground) = 3·0 m.

	JANUARY			FEBRUARY			MARCH			APRIL			MAY			JUNE		
	Max.	Min.	Mean	Max.	Min.	Mean	Max.	Min.	Mean	Max.	Min.	Mean	Max.	Min.	Mean	Max.	Min.	Mean
	degrees Absolute																	
1	79·4	73·1	76·0	74·0	70·1	72·8	75·3	68·3	72·0	84·8	77·9	80·8	83·2	78·1	80·1	02·4	89·7	96·3
2	79·6	69·6	76·7	74·9	72·4	74·0	77·3	69·1	72·9	80·0	76·5	78·8	81·1	78·0	*79·5*	04·6	91·0	98·3
3	79·5	69·8	75·7	76·5	74·2	75·3	76·8	68·4	72·6	82·2	75·6	78·9	90·0	80·2	85·4	*05·7*	90·9	*98·6*
4	76·8	73·4	75·3	*77·4*	72·6	*75·7*	75·2	72·0	73·6	80·5	77·2	*78·7*	86·1	79·2	83·5	94·7	87·9	92·1
5	75·9	72·9	74·2	73·8	71·4	72·3	73·8	72·3	73·3	82·3	76·0	79·9	89·3	*77·1*	84·6	89·5	83·3	86·7
6	73·9	70·5	71·5	72·1	70·5	71·5	73·7	71·4	72·6	84·4	81·2	82·4	90·4	81·4	85·8	89·3	82·8	85·7
7	75·6	71·4	73·7	72·4	71·3	71·8	75·6	*67·9*	*71·7*	87·3	80·1	83·2	94·8	83·7	89·2	92·0	84·1	86·9
8	80·2	74·8	77·0	72·8	71·5	72·2	77·7	71·7	74·5	83·7	77·9	81·9	91·7	84·6	88·2	89·4	83·3	86·2
9	80·2	73·7	77·7	75·3	71·2	73·2	80·1	71·1	75·9	81·9	75·5	78·8	97·5	81·2	89·9	91·9	84·7	88·0
10	80·0	71·3	75·6	75·4	73·6	74·6	80·0	73·7	77·1	86·6	*73·2*	79·5	88·7	81·5	86·4	94·8	*80·9*	88·5
11	82·7	77·2	79·8	74·1	69·8	71·5	80·0	73·5	75·1	87·9	74·5	81·2	91·7	79·3	86·6	95·0	82·0	89·5
12	81·7	77·8	79·8	70·7	69·4	70·1	76·6	72·8	73·7	88·6	76·4	82·8	92·2	84·0	88·1	90·6	82·4	86·9
13	81·7	76·8	79·3	72·0	70·2	71·1	81·4	76·6	80·3	*91·6*	74·9	83·6	99·9	85·0	92·1	90·0	81·2	85·5
14	83·8	76·3	80·9	73·6	71·3	72·3	80·4	72·7	75·2	90·2	78·6	84·4	96·9	83·2	90·0	88·6	82·3	*85·3*
15	83·4	81·1	*82·7*	73·3	70·7	72·3	75·7	70·3	73·2	87·8	81·8	85·0	89·0	82·1	85·0	88·3	83·8	86·0
16	*84·0*	80·3	81·9	71·7	70·1	70·8	86·0	75·7	80·4	91·1	78·7	84·9	88·4	81·4	84·6	89·9	81·3	86·5
17	83·4	*76·1*	80·2	70·6	69·8	70·3	85·9	76·5	80·8	89·7	78·6	84·1	91·3	79·3	86·0	96·8	85·1	91·8
18	81·9	73·9	78·1	71·7	69·7	70·7	83·3	79·3	81·6	90·7	79·2	84·3	87·3	80·2	83·9	94·3	87·6	90·5
19	77·3	74·6	76·3	72·0	70·5	71·3	82·2	80·0	80·9	85·9	80·7	83·2	89·1	82·1	85·0	92·8	86·2	89·1
20	77·7	73·9	76·3	72·4	70·6	71·4	84·1	79·3	81·2	85·4	78·5	82·7	84·9	81·2	83·2	90·2	85·9	88·2
21	77·2	72·8	75·2	72·0	69·1	70·7	84·1	80·4	82·1	86·2	81·2	83·7	86·8	82·0	84·3	93·5	85·3	88·5
22	76·4	69·9	73·7	71·6	69·1	70·4	84·2	79·4	81·5	86·3	80·7	83·1	91·4	83·1	85·9	91·9	84·5	87·9
23	74·8	69·9	73·0	72·5	66·6	69·9	83·6	79·3	81·7	84·3	80·0	82·1	89·2	81·9	84·8	92·9	83·4	88·2
24	73·3	70·5	71·8	74·1	*63·3*	*68·9*	80·2	75·6	77·9	87·2	81·1	83·9	92·3	80·9	86·8	97·1	82·5	90·9
25	73·6	69·2	71·8	75·0	64·9	70·3	82·2	74·3	78·1	90·1	79·3	*85·3*	91·9	84·0	87·4	95·6	86·6	90·9
26	73·7	70·3	71·6	*77·4*	72·3	74·5	83·1	77·8	79·8	89·2	81·1	84·5	94·2	84·9	89·5	02·0	84·7	94·4
27	72·0	70·1	71·1	76·3	72·6	74·3	84·8	79·0	81·5	88·6	77·2	83·5	94·4	84·5	88·4	98·2	90·7	94·5
28	71·7	65·0	69·5	74·3	71·0	73·3	*87·3*	80·9	*83·2*	88·0	81·5	84·7	97·8	81·1	90·7	98·7	89·1	93·7
29	70·3	*63·5*	*67·1*				86·2	81·3	*83·2*	88·1	79·0	83·2	02·1	87·1	95·1	92·6	88·0	90·3
30	72·0	66·4	69·5				83·9	79·8	81·7	83·1	78·9	80·6	*03·1*	89·5	*96·6*	94·0	87·0	89·9
31	74·4	70·0	72·3				80·8	79·3	80·2				02·8	87·7	95·7			
Mean	77·7	72·5	75·3	73·5	70·3	72·1	80·7	75·2	77·7	86·5	78·4	82·5	91·9	82·2	87·2	94·2	85·3	89·9

	JULY			AUGUST			SEPTEMBER			OCTOBER			NOVEMBER			DECEMBER		
	Max.	Min.	Mean	Max.	Min.	Mean	Max.	Min.	Mean	Max.	Min.	Mean	Max.	Min.	Mean	Max.	Min.	Mean
	degrees Absolute																	
1	92·9	86·7	89·9	98·6	88·8	92·9	96·3	85·3	91·1	89·2	76·7	82·9	87·2	77·1	83·0	73·5	*68·0*	*70·3*
2	94·3	87·0	90·3	96·6	90·5	92·3	96·3	86·8	91·2	90·6	77·8	84·9	87·5	82·6	85·5	77·6	72·9	74·8
3	94·2	87·5	90·8	97·9	88·7	92·7	96·7	83·8	90·7	89·5	80·3	85·0	87·0	81·7	83·5	77·1	72·8	75·6
4	94·7	87·3	90·3	96·3	88·6	92·5	97·1	87·4	91·4	91·6	76·9	83·7	85·4	80·1	83·2	77·9	74·8	76·7
5	90·6	84·8	88·4	92·6	88·1	90·1	97·3	85·7	91·2	90·8	76·4	82·3	86·3	77·2	83·7	82·0	*76·9*	80·4
6	90·4	83·7	87·2	95·2	87·9	91·1	95·0	86·4	90·1	93·0	77·0	84·7	79·9	74·9	77·1	81·5	78·3	79·7
7	92·3	85·4	88·4	92·4	85·0	*89·0*	93·3	84·9	90·0	*94·3*	81·2	87·4	85·0	75·3	80·8	79·9	74·9	78·0
8	89·8	84·9	86·9	96·7	*82·2*	89·4	95·5	84·9	91·3	90·2	83·8	86·9	87·3	81·4	84·0	81·1	74·9	78·8
9	89·4	84·5	*86·6*	96·7	84·2	90·9	94·1	82·0	89·1	90·1	80·3	85·6	88·6	84·2	85·8	80·6	78·1	79·5
10	89·8	85·0	87·0	95·0	85·9	90·4	95·4	87·2	91·0	92·0	84·9	*87·8*	87·8	83·0	84·8	80·4	74·8	78·3
11	90·1	85·0	87·5	97·1	85·2	91·3	97·3	83·6	91·0	91·0	83·9	87·8	88·9	82·6	86·5	78·3	71·7	76·0
12	92·5	*83·5*	88·3	98·3	87·6	92·4	93·3	89·3	91·4	93·2	82·0	87·2	88·8	83·8	87·1	83·9	78·3	81·4
13	99·6	87·4	92·3	00·1	85·2	93·1	93·1	84·8	89·8	90·5	80·9	85·8	83·9	79·5	81·9	83·1	80·5	82·1
14	00·2	90·2	94·0	00·5	88·1	93·4	92·3	84·0	88·9	86·3	80·1	84·3	81·3	78·5	79·7	80·5	77·4	79·2
15	99·3	90·0	94·5	03·0	89·3	95·2	*97·8*	88·5	92·2	89·3	76·5	84·2	79·9	75·7	78·6	79·6	76·0	78·3
16	98·6	89·1	93·5	*03·7*	89·6	*97·1*	97·2	85·3	91·7	88·3	83·0	86·4	79·1	74·4	76·3	80·9	79·3	80·2
17	93·3	89·0	91·2	03·0	91·1	96·8	93·4	82·2	88·1	88·2	83·3	85·2	77·8	73·2	75·3	80·8	79·5	80·2
18	96·1	88·8	91·7	03·5	91·2	96·9	91·4	86·0	89·2	87·2	81·1	84·5	76·9	73·7	75·6	80·7	78·7	79·8
19	95·2	88·5	91·4	00·4	91·4	95·5	97·2	90·2	*92·6*	87·4	76·8	82·5	79·1	76·3	77·6	82·2	78·8	80·3
20	94·2	87·0	90·1	01·0	87·6	93·9	94·4	87·8	90·8	84·6	74·3	81·0	87·2	77·2	84·1	83·9	78·2	81·9
21	95·8	88·9	92·4	99·2	90·3	94·2	91·4	84·0	88·6	86·0	*72·8*	*78·9*	88·0	86·7	87·4	83·2	78·3	80·9
22	96·3	88·7	92·7	98·6	90·4	94·0	91·2	81·6	87·0	88·2	79·1	84·2	*89·0*	87·1	*87·8*	83·5	80·8	81·8
23	97·1	87·3	91·8	99·4	88·8	92·5	89·1	81·9	85·0	88·9	80·4	84·6	*89·0*	80·5	86·3	83·0	80·0	81·5
24	98·2	85·7	92·0	97·5	87·0	92·1	87·1	79·3	83·2	86·8	77·7	82·9	82·4	78·4	80·3	83·3	80·0	81·8
25	00·2	88·9	94·3	98·1	87·8	92·7	90·0	*77·5*	84·5	87·8	81·3	84·2	80·1	74·0	77·9	84·0	75·9	81·6
26	02·1	91·0	95·4	98·0	87·9	92·6	92·0	84·0	87·6	84·1	80·5	81·8	77·2	72·3	74·5	80·9	76·0	78·6
27	*02·4*	90·1	96·5	99·2	88·0	93·5	92·3	82·0	86·4	83·1	80·9	81·9	77·2	71·8	74·4	*85·8*	79·5	*83·7*
28	01·5	93·0	*97·4*	00·2	87·9	93·3	89·4	84·3	87·0	84·0	80·4	81·8	78·1	72·8	75·2	83·0	77·2	81·1
29	99·5	91·7	95·0	98·0	88·4	92·3	91·9	82·7	87·4	82·5	76·6	80·7	77·2	74·0	75·7	78·2	74·1	76·1
30	95·3	90·2	92·8	95·4	86·8	91·1	87·4	79·0	*82·7*	82·7	74·1	79·4	74·9	*68·0*	*73·4*	75·6	73·1	74·4
31	97·6	89·3	92·8	96·5	86·8	91·6				85·1	80·7	82·9				77·5	73·0	75·2
Mean	95·6	87·7	91·4	98·3	87·9	92·8	93·5	84·4	89·1	88·3	79·4	84·0	83·3	77·9	80·9	80·8	76·5	79·0
									Annual	87·1	79·9	83·5						

MEAN RELATIVE HUMIDITY AND VAPOUR PRESSURE FOR EACH DAY

Mean percentages from readings at exact hours 0h. to 24h., G.M.T.; vapour pressure from daily mean temperature and relative humidity

179 KEW OBSERVATORY: North-wall screen: h_t = 3·0 m.

	JANUARY		FEBRUARY		MARCH		APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER		OCTOBER		NOVEMBER		DECEMBER	
	Rel. hum.	Vap. press.	Rel. hum.	Vap. press.	Rel. hum.	Vap. press.	Rel. hum.	Vap. press.	Rel. hum.	Vap. press.	Rel. hum.	Vap. press.	Rel. hum.	Vap. press.	Rel. hum.	Vap. press.	Rel. hum.	Vap. press.	Rel. hum.	Vap. press.	Rel. hum.	Vap. press.	Rel. hum.	Vap. press.
	%	mb.	%	mb.	%	mb.	%	mb.	%	mb.	%	mb.	%	mb.	%	mb.	%	mb.	%	mb.	%	mb.	%	mb.
1	90·5	6·9	81·5	4·9	*65·8*	*3·7*	83·9	8·9	76·5	7·7	63·3	18·1	80·3	15·5	71·7	16·7	70·6	14·6	74·9	9·1	90·4	11·1	98·3	*4·9*
2	89·5	7·1	90·0	5·9	69·8	4·2	*91·5*	8·4	78·1	*7·6*	59·6	19·2	78·7	15·5	70·0	15·7	69·8	14·6	81·4	11·4	86·2	12·5	83·2	5·8
3	89·7	6·7	*95·6*	6·9	74·5	4·4	90·8	8·4	67·6	9·7	*58·9*	19·3	79·0	16·1	70·5	16·2	69·3	14·1	72·4	10·1	76·0	9·7	90·5	6·7
4	83·6	6·0	93·1	*6·9*	76·7	4·9	79·7	7·3	83·3	10·6	68·7	15·2	78·5	15·5	67·7	15·4	68·7	14·5	78·6	9·3	89·2	11·1	*93·2*	7·4
5	83·6	5·6	81·4	4·7	90·5	5·6	81·7	8·1	72·3	9·9	78·3	12·3	*64·4*	*11·3*	*80·5*	15·7	66·8	14·0	88·0	6·7	82·6	10·6	85·4	8·8
6	79·9	4·3	86·8	4·7	79·3	4·7	80·3	9·5	80·6	11·9	72·0	10·6	74·4	12·0	69·7	14·4	*60·9*	11·9	82·3	10·3	*98·1*	8·0	91·7	9·0
7	92·6	6·0	74·3	4·1	72·7	4·0	70·2	8·7	63·8	11·8	74·0	11·7	69·0	12·1	61·2	*11·1*	80·1	15·5	83·3	13·7	90·4	9·6	91·9	8·0
8	94·3	7·7	82·1	4·7	83·6	5·7	71·2	8·1	73·5	12·7	73·4	11·1	76·8	12·2	69·4	13·0	71·6	15·1	91·8	14·6	87·4	11·5	87·9	8·1
9	89·0	7·6	91·9	5·7	78·2	5·9	60·9	*5·6*	68·2	13·2	61·8	10·5	79·5	12·4	68·7	14·1	67·4	12·3	87·7	12·8	85·0	12·6	80·5	7·8
10	94·6	7·0	93·2	6·4	95·0	7·8	76·1	7·4	81·3	12·4	63·0	11·1	84·7	13·5	74·0	14·7	73·0	15·1	87·3	14·7	74·3	10·3	79·5	7·1
11	90·2	8·9	87·0	4·7	88·7	6·3	68·4	7·4	67·8	10·0	68·3	12·8	72·3	12·0	72·3	15·2	75·0	15·5	88·8	*15·0*	76·3	11·8	88·9	6·7
12	84·7	8·4	83·8	4·0	85·0	5·5	63·7	7·7	73·1	12·6	61·3	9·7	71·9	12·5	68·5	15·4	86·1	18·2	87·9	14·2	79·2	12·7	92·0	10·2
13	78·3	7·5	84·0	4·4	*97·0*	9·9	65·5	8·4	70·7	15·6	59·6	*8·6*	78·8	17·6	66·3	15·6	86·8	16·6	*91·9*	13·6	69·5	7·9	86·4	10·0
14	89·3	9·5	83·1	4·8	86·6	6·2	69·8	9·4	65·7	12·7	85·8	12·3	80·0	19·9	71·9	17·2	86·8	15·7	90·0	12·0	85·3	8·4	78·4	7·4
15	84·4	*10·1*	75·8	4·4	85·7	5·3	83·5	*11·7*	71·5	10·1	78·6	11·8	70·8	18·2	63·8	17·1	79·2	17·6	79·4	10·5	73·0	6·6	86·3	7·7
16	85·2	9·7	69·5	3·5	79·9	8·2	78·5	10·9	79·1	10·8	77·0	11·9	79·3	19·1	58·3	*17·5*	75·0	16·2	82·3	12·7	76·3	5·9	82·6	8·4
17	81·6	8·3	81·3	4·0	83·0	8·8	73·7	9·7	70·3	10·5	66·9	14·5	85·5	17·9	58·6	17·3	74·5	12·8	82·5	11·7	79·8	5·8	86·3	8·8
18	86·0	7·5	76·3	3·9	83·3	9·3	75·8	10·1	*87·9*	11·5	81·3	16·3	*86·5*	18·7	58·3	17·3	88·7	16·3	74·9	10·2	79·8	5·9	91·7	9·1
19	*95·3*	7·4	74·7	4·0	86·8	9·3	83·0	10·3	76·1	10·8	72·5	13·3	81·8	17·3	*55·1*	15·0	*88·7*	*20·2*	76·5	9·1	93·4	7·9	82·1	8·4
20	81·4	6·3	85·1	4·6	75·4	8·2	87·0	10·5	79·8	10·0	*85·5*	14·8	73·9	14·4	64·6	15·9	87·9	17·9	75·3	8·1	96·0	12·7	89·7	10·2
21	86·3	6·2	82·7	4·2	87·9	10·1	76·7	9·9	78·7	10·5	77·8	13·7	71·8	16·2	59·6	15·0	71·7	12·7	87·1	8·1	92·4	*15·2*	79·7	8·5
22	80·0	5·1	81·0	4·0	85·7	9·5	76·0	9·4	78·7	11·7	70·7	12·0	78·2	17·9	62·6	15·6	74·6	11·9	89·6	11·9	90·3	*15·2*	71·0	8·0
23	73·3	4·5	79·4	3·7	79·6	9·0	76·6	8·9	86·7	12·0	72·0	12·4	72·7	15·8	75·0	17·0	70·4	9·9	84·2	11·5	74·6	11·4	71·0	7·9
24	77·3	4·3	76·9	*3·3*	82·5	7·1	60·3	7·9	77·6	12·4	66·0	13·5	70·3	15·4	64·1	14·2	71·3	8·9	90·3	11·0	69·3	7·1	86·0	9·8
25	84·7	4·7	75·9	3·7	76·3	6·7	72·6	10·4	78·2	12·8	67·8	13·9	69·6	17·6	65·4	15·0	73·5	10·0	77·1	11·3	*64·3*	5·6	85·8	9·6
26	73·6	4·0	*67·8*	4·6	70·7	7·0	60·0	8·1	73·7	13·8	59·8	17·8	74·7	20·2	65·4	14·9	74·2	12·3	62·5	7·1	68·5	*4·7*	76·4	6·9
27	*66·9*	3·5	68·4	4·6	89·0	9·9	64·6	8·2	75·8	13·3	80·3	*20·6*	72·8	21·1	60·0	14·5	79·2	12·2	*61·0*	*7·0*	83·8	5·7	84·0	*10·8*
28	81·0	3·7	73·9	4·6	89·2	11·1	*58·1*	8·0	66·1	13·4	83·4	20·2	74·1	*22·6*	60·8	14·5	86·6	13·8	63·6	7·2	82·7	5·9	75·3	8·1
29	74·6	*2·8*			91·8	*11·4*	69·3	8·6	60·5	16·1	74·1	14·6	70·9	18·8	69·3	15·5	77·1	12·7	73·6	7·7	85·6	6·3	*66·0*	5·0
30	70·9	3·3			88·2	9·9	77·8	8·1	*57·7*	*16·8*	76·7	14·8	75·1	17·4	67·7	14·0	68·2	*8·2*	85·1	8·2	89·8	5·7	82·8	5·6
31	83·5	4·8			91·6	9·3			60·3	16·7			71·0	16·4	61·3	13·2			75·2	9·2			88·0	6·3
Mean*	83·7	6·3	81·3	4·6	82·9	7·4	74·2	8·8	73·6	12·0	71·6	14·0	75·7	16·2	66·2	15·3	75·8	14·0	80·9	10·6	82·3	9·1	84·3	8·0

* Mean of the column

RELATIVE HUMIDITY

Monthly and annual means of values at exact hours, G.M.T.

180 KEW OBSERVATORY: h_t = 3·0 m.

	Hour G.M.T. 0	1	2	3	4	5	6	7	8	9	10	11	Noon	13	14	15	16	17	18	19	20	21	22	23	24	Mean*
	per cent.																									
Jan.	85·6	86·7	87·0	87·1	87·5	*87·9*	87·5	86·9	87·1	86·1	85·2	83·1	79·3	78·1	77·5	*77·2*	78·2	80·0	81·8	83·0	83·2	83·4	84·7	85·5	85·5	83·7
Feb.	83·5	84·0	84·1	*84·2*	84·0	83·6	83·8	83·9	83·7	82·4	81·6	80·5	78·3	76·8	77·0	*76·6*	76·6	78·0	79·2	80·0	81·4	82·4	82·7	82·6	82·8	81·3
Mar.	85·9	87·5	87·9	88·1	88·9	*89·3*	89·2	89·3	88·3	86·9	83·6	80·4	75·9	73·7	*72·7*	73·1	75·1	76·7	79·1	80·8	83·2	82·9	85·0	85·9	86·7	82·9
Apr.	84·1	84·1	86·2	86·5	87·5	*88·0*	86·5	83·2	78·1	71·9	66·4	62·9	59·7	59·2	*59·2*	59·3	60·6	62·2	67·2	71·7	75·8	79·2	80·6	82·0	83·7	74·2
May	83·9	85·2	86·6	86·7	*87·1*	87·1	84·7	79·8	75·2	71·5	67·1	65·9	63·9	61·7	60·5	59·1	*58·8*	61·2	62·7	66·4	71·7	77·1	80·1	82·3	83·9	73·6
June	81·8	84·2	85·1	86·7	*87·4*	85·5	81·8	77·0	73·4	70·1	67·0	62·7	62·4	58·6	58·4	58·0	*57·7*	59·1	59·9	62·2	68·4	74·0	77·3	80·0	82·2	71·6
July	85·0	86·2	87·9	89·0	*89·4*	89·1	87·3	84·1	79·8	75·2	71·0	67·1	64·7	61·8	*61·6*	62·6	63·5	63·9	65·4	68·0	73·5	78·4	80·5	82·6	84·5	75·7
Aug.	78·2	80·9	82·7	84·1	84·5	*85·3*	85·0	81·8	75·7	69·1	61·7	55·5	49·9	47·5	45·7	*45·5*	45·7	47·5	51·0	55·6	61·7	67·1	71·6	75·5	78·2	66·2
Sept.	84·6	86·5	87·5	88·5	89·7	89·8	*90·0*	88·6	83·5	77·4	70·1	65·8	63·8	61·0	59·2	*58·6*	59·0	60·7	64·5	71·0	75·8	78·5	81·6	84·0	84·8	75·8
Oct.	88·0	89·3	89·8	89·8	*90·5*	90·2	89·4	89·9	88·7	85·4	79·9	74·3	68·1	65·6	63·1	*62·4*	64·5	70·7	77·0	81·0	83·1	85·0	86·9	88·0	88·0	80·9
Nov.	86·4	87·0	87·5	87·1	87·3	87·7	*88·3*	*88·3*	87·8	84·8	81·2	78·6	74·8	72·3	*71·3*	72·0	75·3	78·2	80·9	81·3	82·6	83·7	85·0	85·8	86·8	82·3
Dec.	86·7	87·3	86·9	87·0	*87·3*	87·3	87·1	87·1	87·5	86·1	83·6	83·0	79·9	*78·9*	79·2	79·5	81·2	82·4	83·1	83·9	83·7	83·6	84·1	85·9	86·7	84·3
Annual	84·5	85·8	86·6	87·1	*87·6*	87·0	86·7	85·0	82·4	78·9	74·3	71·6	68·3	66·5	65·4	*65·3*	66·3	68·3	70·9	73·7	77·0	79·6	81·7	83·4	84·5	77·7

VAPOUR PRESSURE

Monthly and annual means of values at exact hours, G.M.T., computed from corresponding mean values of temperature and relative humidity

181 KEW OBSERVATORY: h_t = 3·0 m.

	Hour G.M.T. 0	1	2	3	4	5	6	7	8	9	10	11	Noon	13	14	15	16	17	18	19	20	21	22	23	24	Mean*
	millibars																									
Jan.	6·0	6·1	6·0	5·9	5·9	5·9	5·9	*5·9*	5·9	5·9	6·0	6·2	6·1	*6·2*	6·2	6·1	6·1	6·0	6·1	6·1	6·1	6·1	6·1	6·0	6·0	6·0
Feb.	4·7	4·6	4·6	4·6	4·5	4·5	4·5	*4·5*	4·5	4·5	4·6	*4·7*	4·7	4·6	4·7	4·7	4·6	4·6	4·6	4·6	4·6	4·6	4·5	4·5	4·6	
Mar.	6·9	7·0	7·0	7·0	7·0	6·9	*6·8*	6·9	7·0	7·2	7·3	*7·3*	7·1	7·1	7·1	7·1	7·2	7·2	7·2	7·1	7·1	7·0	7·1	7·1	7·1	7·1
Apr.	8·9	8·7	8·7	8·6	8·5	8·5	8·5	8·6	8·6	8·5	8·3	8·3	*8·2*	8·4	8·6	8·7	8·8	8·9	9·1	9·1	9·1	*9·2*	9·1	8·9	8·9	8·7
May	11·4	11·3	11·2	11·0	*10·8*	11·0	11·3	11·5	11·8	11·9	11·7	12·0	12·1	12·1	12·2	12·2	12·0	*12·4*	12·2	12·2	12·0	12·2	12·0	11·9	11·7	11·8
June	13·5	13·6	13·4	13·4	*13·2*	13·4	13·5	13·5	13·7	*13·9*	13·9	13·6	13·8	13·3	13·5	13·5	13·5	13·7	13·8	13·8	13·7	13·9	13·7	13·6	13·5	13·6
July	15·7	15·6	15·7	15·6	15·6	15·6	15·7	15·8	15·9	15·8	15·7	15·6	15·7	*15·5*	15·8	16·1	16·3	16·3	*16·3*	16·3	16·3	16·3	16·1	15·8	15·7	15·9
Aug.	15·4	15·4	15·3	15·1	15·0	14·9	15·1	15·5	*15·6*	15·5	15·1	14·8	14·1	14·0	*13·9*	14·1	14·2	14·4	14·6	14·6	14·7	15·0	15·3	15·3	15·3	14·9
Sept.	13·9	13·8	13·7	13·6	13·5	13·4	13·5	13·8	14·1	*14·1*	13·9	13·7	13·8	13·6	13·5	13·4	13·3	*13·3*	13·4	13·7	13·7	13·6	13·7	13·8	13·6	13·6
Oct.	10·3	10·3	10·1	10·0	9·9	*9·9*	10·0	10·0	10·2	10·6	10·8	10·8	10·3	10·7	10·6	10·5	10·6	11·0	11·1	*11·1*	11·1	11·1	10·8	10·6	10·3	10·5
Nov.	8·8	8·8	8·8	8·7	8·7	8·7	8·7	8·7	8·7	8·8	8·9	8·8		8·7	8·7	8·7	8·8	8·8	*9·0*	8·8	8·7	8·7	8·7	*8·6*	8·6	8·7
Dec.	*7·7*	7·8	7·8	7·9	7·9	7·9	7·9	7·8	7·8	7·8	7·8	*8·0*	8·0	7·9	8·0	8·0	8·0	8·0	8·0	7·9	7·8	7·8	7·8	7·8	7·8	7·9
Annual	9·8	9·7	9·7	9·6	9·6	*9·5*	9·6	9·7	9·8	9·9	9·9	10·0	9·9	9·9	9·9	10·0	10·0	10·0	10·1	*10·1*	10·0	9·8	9·9	9·9	9·8	9·9

* Mean of values, 1,2,.....23,½(0 + 24).

RAINFALL

Amount in millimetres, duration in hours and maximum rate of fall for each day 0h. to 24h., G.M.T.

182 KEW OBSERVATORY: h_r(height of receiving surface above M.S.L.) = height of station above M.S.L. + height of receiving surface above ground = 5·5 m. + 0·53 m.

	JANUARY			FEBRUARY			MARCH			APRIL			MAY			JUNE		
	Amount	Duration	Max. rate	Amount	Duration	Max. rate	Amount	Duration	Max. rate	Amount	Duration	Max. rate	Amount	Duration	Max. rate	Amount	Duration	Max. rate
	mm.	hr.	mm./hr.	mm.	hr.	mm./hr.	mm.	hr.	mm./hr.	mm.	hr.	mm./hr.	mm.	hr.	mm./hr.	mm.	hr.	mm./hr.
1	0·4	0·3	...	...	...	...	...	...	...	...	...	...	1·7	1·4	6	...	...	...
2	2·6	2·2	8	4·4	*7·6*	...	...	...	...	*8·0*	*7·4*	7	0·9	1·2	8	...	...	...
3	0·1	...	...	*6·6*	6·6	*11*	...	...	...	6·8	4·9	12	6·2	2·9	19	0·2	0·2	7
4	...	...	...	2·3	1·7	...	7·4	7·2	...	2·8	4·0	...	*6·8*	*6·5*	10	2·5	0·8	37
5	...	...	...	0·5	2·0	...	14·3	10·5	...	5·9	5·0	6	...	...	...	2·2	2·3	35
6	1·7	4·0	...	2·4	6·9	...	0·7	1·2	...	...	...	...	1·5	1·7	...	1·7	0·9	38
7	4·3	3·5	6	...	...	...	...	...	...	1·7	2·6	8	...	...	...	5·5	5·0	6
8	*5·0*	3·7	15	4·4	4·5	...	0·4	0·7	...	0·6	0·8	16	0·1	0·2	...	4·8	1·2	60
9	...	...	...	*5·5*	7·2	...	3·2	2·2	6	...	...	...	...	...	...	...	...	...
10	3·8	*5·4*	11	1·4	1·0	...	15·6	8·2	*20*	...	...	...	3·6	2·1	13	...	...	...
11	0·4	0·7	...	...	...	...	5·4	3·7	6	...	...	...	...	...	...	...	...	...
12	4·5	1·7	18	...	...	...	6·7	8·4	10	...	...	...	...	...	...	...	...	...
13	2·8	0·5	*94*	...	...	...	10·6	7·8	15	...	...	...	0·2	0·1	...	...	...	...
14	0·9	1·6	...	...	...	...	2·1	3·0	6	...	...	...	0·9	0·9	9	8·2	*6·3*	7
15	0·1	0·3	...	...	...	...	6·0	7·0	...	...	...	...	1·2	1·1	22	*14·1*	6·0	24
16	...	...	...	...	...	...	6·6	7·1	...	...	...	...	2·6	1·1	*24*	...	...	...
17	0·7	0·4	22	...	...	...	0·7	0·8	...	...	...	...	...	...	...	...	...	...
18	...	...	...	...	...	...	0·5	0·3	10	...	...	...	2·2	3·2	...	1·7	3·1	...
19	...	...	...	...	...	...	2·7	2·0	*20*	...	...	...	...	...	...	...	...	...
20	...	...	...	0·4	0·8	...	0·3	0·7	...	1·3	1·8	...	...	...	...	0·5	0·5	13
21	...	...	...	2·1	3·0	...	3·5	3·2	15	...	...	...	...	...	...	2·9	0·4	39
22	...	...	...	0·1	0·1	...	2·6	1·6	15	3·5	1·4	*34*	...	...	...	...	...	...
23	...	...	...	...	...	...	1·8	1·1	10	7·6	5·6	11	4·6	4·3	7	...	...	...
24	...	...	...	...	...	...	0·5	1·2	...	...	...	...	0·4	0·9	...	...	...	...
25	...	...	...	...	...	...	...	...	...	...	...	...	0·8	0·9	8	...	...	...
26	1·2	4·4	...	...	...	...	1·8	3·6	...	...	...	...	0·6	1·4	12	...	...	...
27	0·6	1·5	...	...	...	...	3·6	4·5	*20*	...	...	...	...	...	...	12·7	1·5	82
28	2·7	5·3	...	0·2	0·6	...	1·7	3·9	...	0·1	0·1	...	...	...	...	11·4	0·6	*126*
29	...	...	...				*16·6*	*11·3*	15	2·9	2·1	13	...	...	...	...	...	...
30	...	...	...				1·4	1·6	6	1·5	2·3	13	...	...	...	12·2	4·0	29
31	2·6	4·6	...				1·6	2·4	...				...	...	...			
Total	34·4	40·1	–	30·3	42·0	–	118·3	105·2	–	42·7	38·0	–	34·3	29·9	–	80·6	32·8	–

	JULY			AUGUST			SEPTEMBER			OCTOBER			NOVEMBER			DECEMBER		
	Amount	Duration	Max. rate	Amount	Duration	Max. rate	Amount	Duration	Max. rate	Amount	Duration	Max. rate	Amount	Duration	Max. rate	Amount	Duration	Max. rate
	mm.	hr.	mm./hr.	mm.	hr.	mm./hr.	mm.	hr.	mm./hr.	mm.	hr.	mm./hr.	mm.	hr.	mm./hr.	mm.	hr.	mm./hr.
1	0·5	1·7	...	1·5	0·6	12	...	...	...	...	...	...	...	...	...	...	...	...
2	2·4	2·8	...	1·6	1·0	17	...	...	...	...	...	...	0·8	0·8	...	...	...	...
3	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1·8	3·7	...
4	2·5	1·0	10	...	...	...	...	...	...	...	...	...	0·7	2·2	...	1·2	3·0	...
5	...	...	...	2·0	0·9	8	...	...	...	...	...	...	0·4	1·1	...	*12·7*	6·5	25
6	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	5·5	2·9	9
7	0·5	0·3	32	...	...	...	0·1	0·4	...	...	...	...	...	...	...	...	...	...
8	2·4	0·9	32	...	...	...	0·4	0·5	...	...	...	...	...	...	...	10·1	3·9	37
9	7·5	1·5	*103*	...	...	...	...	...	...	...	...	...	*6·3*	4·0	7	...	...	...
10	2·5	3·2	6	...	...	...	...	...	...	0·7	0·5	9	3·7	2·0	7	...	...	...
11	1·0	1·3	6	...	...	...	...	...	...	...	...	...	1·6	1·6	...	...	...	...
12	...	...	...	...	...	...	1·1	2·0	7	...	...	...	0·6	0·6	*34*	...	...	...
13	...	...	...	...	...	...	0·9	1·6	...	...	...	...	...	...	...	...	...	...
14	...	...	...	...	...	...	...	...	...	0·3	0·6	...	4·8	*7·9*	9	0·1	0·1	...
15	...	...	...	...	...	...	...	...	...	...	...	...	0·6	1·1	...	...	...	...
16	0·4	0·4	...	...	...	...	0·1	0·2	...	...	...	...	...	...	...	...	...	...
17	*9·7*	*8·6*	7	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
18	3·3	1·7	11	...	...	...	*16·0*	3·2	34	...	...	...	1·1	2·5	...	6·3	*11·6*	7
19	1·0	0·6	35	...	...	...	1·4	1·4	6	...	...	...	5·6	4·5	7	0·2	0·5	...
20	...	...	...	...	...	...	5·9	*3·9*	24	...	...	...	0·2	0·2	...	...	...	...
21	...	...	...	...	...	...	0·9	0·5	*39*	...	...	...	...	...	...	...	...	...
22	...	...	...	...	...	...	0·7	0·9	...	1·1	*1·6*	7	0·7	0·8	12	...	...	...
23	...	...	...	*5·1*	*1·4*	*55*	1·9	0·9	28	*1·6*	1·4	*12*	...	...	...	...	...	...
24	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1·0	1·6	...
25	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	8·9	5·1	35
26	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1·4	3·7	7
27	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2·3	3·5	...
28	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2·0	0·7	*62*
29	2·2	0·3	68	...	...	...	0·4	0·9	...	...	...	...	...	...	...	...	...	...
30	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·2	0·4	...
31	...	...	...	...	...	...				...	...	...				0·6	0·7	...
Total	35·9	24·3	–	10·2	3·9	–	29·8	16·4	–	3·7	4·1	–	27·1	29·3	–	54·3	48·3	–

Monthly and annual totals of amounts in sixty-minute periods between exact hours, G.M.T.

183 KEW OBSERVATORY: h_r = 5·5 m. + 0·53 m.

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	0-24
	millimetres																								
Jan.	1·5	*4·3*	0·4	0·1	1·2	3·4	0·3	1·0	0·2	0·6	1·1	1·1	1·7	2·2	1·0	1·3	0·2	1·6	2·3	2·1	2·5	1·0	2·6	0·7	34·4
Feb.	1·3	1·3	3·3	1·9	1·4	0·6	1·0	0·7	1·0	0·9	1·9	*3·4*	1·2	1·3	2·1	0·5	0·2	0·2	0·2	0·8	1·1	1·7	1·1	1·2	30·3
Mar.	6·1	9·0	6·8	3·6	2·8	1·6	1·5	4·9	2·7	1·2	4·0	1·9	0·7	0·5	1·2	6·2	7·0	10·2	*11·9*	9·5	5·5	5·8	6·5	7·2	118·3
Apr.	···	1·3	2·1	0·3	0·9	2·8	0·7	0·6	0·3	0·1	0·5	1·2	1·4	3·6	0·8	2·7	3·2	*5·6*	3·4	2·9	1·7	2·6	3·2	0·8	42·7
May	*4·7*	1·1	0·2	0·9	0·7	0·6	0·9	2·4	3·8	2·5	1·6	3·5	4·5	2·5	0·3	···	0·1	1·3	0·2	0·1	···	···	0·9	1·5	34·3
June	1·2	1·5	3·6	4·2	3·9	3·2	2·4	3·5	0·9	0·9	0·6	14·6	2·4	3·4	3·6	0·3	*15·3*	1·0	0·1	2·6	1·1	0·4	8·6	1·3	80·6
July	0·4	2·7	1·0	2·1	1·9	0·9	1·0	···	1·0	0·1	0·4	1·6	···	2·8	*6·2*	2·1	0·6	0·2	2·2	1·1	3·3	3·7	0·5	0·1	35·9
Aug.	···	···	···	···	1·8	···	···	···	···	···	···	···	1·3	···	0·1	0·1	1·5	*4·2*	1·0	···	0·2	···	···	···	10·2
Sept.	1·8	*13·1*	6·6	1·1	0·3	0·5	0·6	0·5	···	0·5	···	0·3	0·2	0·1	0·9	0·7	0·6	0·2	0·7	0·7	0·4	···	···	···	29·8
Oct.	···	···	0·3	0·3	···	···	···	0·4	0·5	0·4	0·2	*0·6*	0·1	0·2	···	0·2	0·4	···	···	···	···	···	0·1	···	3·7
Nov.	*5·6*	1·3	2·0	1·2	0·4	2·1	0·4	1·3	···	0·1	···	0·1	0·3	0·6	0·3	1·7	0·4	0·2	0·3	0·6	1·2	0·9	2·4	3·7	27·1
Dec.	0·8	1·8	3·4	4·2	4·2	*4·5*	4·3	0·9	3·9	1·0	0·9	3·6	1·2	2·7	1·7	0·2	1·5	2·3	2·1	0·2	0·5	1·7	3·2	3·5	54·3
Annual	23·4	*37·4*	29·7	19·9	18·5	21·2	13·1	16·2	14·3	8·3	11·2	31·9	15·0	19·9	18·2	16·0	31·0	27·0	24·4	20·6	17·5	17·8	29·1	20·0	501·6

RAINFALL

Monthly and annual totals of duration in sixty-minute periods between exact hours, G.M.T.

184 KEW OBSERVATORY: h_r = 5·5 m. + 0·53 m.

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	0-24
	hours																								
Jan.	1·2	1·4	0·5	···	0·7	1·7	0·7	0·7	0·3	1·5	2·8	2·1	2·4	1·9	2·3	2·7	0·7	2·4	*4·0*	3·0	2·6	1·6	1·7	1·2	40·1
Feb.	2·0	2·0	*3·0*	2·8	1·9	1·2	2·0	1·4	1·5	1·9	2·2	2·8	2·1	2·1	2·4	1·4	0·8	0·2	0·3	1·1	1·7	1·7	1·5	2·0	42·0
Mar.	5·0	4·8	5·5	3·8	2·6	1·7	2·8	4·5	4·1	2·3	3·1	1·6	0·7	0·4	1·1	6·4	7·0	7·2	*8·7*	7·5	6·0	6·4	6·5	5·5	105·2
Apr.	0·1	1·1	1·5	1·1	1·0	1·1	1·0	1·5	0·8	0·2	1·0	1·0	1·5	2·1	1·7	1·5	2·0	*4·1*	3·4	3·0	1·3	1·9	2·7	1·4	38·0
May	1·9	1·5	0·7	0·4	0·7	0·3	1·0	1·0	2·5	2·2	2·8	*3·5*	3·4	1·8	0·4	0·0	0·3	1·5	0·3	0·3	···	···	0·7	2·7	29·9
June	0·8	1·0	1·2	2·0	2·2	2·5	1·3	1·9	1·3	1·0	0·6	*3·3*	2·0	2·3	0·9	0·6	1·5	1·1	0·1	0·9	0·9	0·2	1·8	1·4	32·8
July	1·1	1·4	0·9	2·1	2·0	1·8	0·2	···	1·3	0·2	0·8	1·2	···	0·3	1·5	1·4	0·6	0·3	1·3	1·0	1·8	*2·1*	0·7	0·3	24·3
Aug.	···	···	···	···	0·5	···	···	···	···	···	···	···	0·4	0·1	0·3	0·1	0·6	*0·8*	*0·8*	···	0·3	···	···	···	3·9
Sept.	0·5	2·4	*2·5*	1·7	0·5	1·0	0·8	1·2	···	0·1	···	0·5	0·3	0·1	0·7	1·3	0·4	0·3	0·7	0·9	0·5	···	···	···	16·4
Oct.	···	···	0·3	0·3	···	···	···	0·3	0·5	0·4	*0·9*	0·5	0·2	0·2	···	0·2	0·2	0·1	···	···	···	···	···	···	4·1
Nov.	*3·9*	2·0	1·4	1·5	0·6	1·6	0·6	1·7	0·3	0·2	···	0·3	1·0	0·6	1·1	1·5	0·9	0·3	1·0	1·3	1·6	1·6	1·8	2·5	29·3
Dec.	1·9	2·2	3·1	2·7	2·2	1·2	2·0	1·3	2·3	1·4	1·8	1·9	1·3	1·9	1·4	0·7	1·5	1·1	1·2	0·6	1·2	2·7	4·7	*6·0*	48·3
Annual	18·4	19·8	20·6	18·4	14·9	14·1	12·4	15·5	14·9	11·4	16·0	18·7	15·3	13·8	13·8	17·8	16·5	19·4	21·8	19·6	17·9	18·2	22·1	*23·0*	414·3

NOTES ON RAINFALL

185 KEW OBSERVATORY

Dry Periods

The following definitions are adopted by the British Rainfall Organization
An "absolute drought" is a period of at least 15 consecutive days to none of which is credited 0·2 mm. of rain or more
A "partial drought" is a period of at least 29 consecutive days, the mean daily rainfall of which does not exceed 0·2 mm.
A "dry spell" is a period of at least 15 consecutive days to none of which is credited 1·0 mm. of rain or more

"Absolute drought": August 6–22; August 24–September 7
"Partial drought": August 6–September 11; September 21–November 8
"Dry spell": August 6–22; August 24–September 11; September 24–October 21; October 24–November 8

Wet Periods

The following definitions are adopted by the British Rainfall Organization
A "rain spell" is a period of at least 15 consecutive days to each of which is credited 0·2 mm. of rain or more
A "wet spell" is a period of at least 15 consecutive days to each of which is credited 1·0 mm. of rain or more

"Rain spell": March 8–24
No "wet spells" occurred in 1947

Rainfall Duration

Hours	0·1–1·0	1·1–2·0	2·1–6·0	6·1–12·0	>12·0
Number of days	55	35	49	19	0

Continuous or Heavy Falls

The fall of the longest duration occurred on March 5 when 12 mm. fell in 9 hr. 42 min.

Heavy Falls in short periods

On both June 27 and 28, 10 mm. fell in 24 min.

Rate of Rainfall (Jardi Recorder)

The highest instantaneous rate of rainfall recorded by this instrument was 126 mm./hr. on June 28 whilst a rate of 103 mm./hr. occurred on July 9.
The maximum rate exceeded 50 mm./hr. on January 13, June 8, 27 and 28, July 9 and 29, August 23 and December 28.

DURATION OF BRIGHT SUNSHINE AND TOTAL SOLAR RADIATION FOR EACH DAY
Solar radiation received on a surface perpendicular to the solar beam

186 KEW OBSERVATORY: h_s(height of recorder above ground) = 13·3 m.

	JANUARY			FEBRUARY			MARCH			APRIL			MAY			JUNE		
	Total for day	Per cent. of possible	Solar radiation	Total for day	Per cent. of possible	Solar radiation	Total for day	Per cent. of possible	Solar radiation	Total for day	Per cent. of possible	Solar radiation	Total for day	Per cent. of possible	Solar radiation	Total for day	Per cent. of possible	Solar radiation
	hr.	%	J./cm.^{2}	hr.	%	J./cm.^{2}	hr.	%	J./cm.^{2}	hr.	%	J./cm.^{2}	hr.	%	J./cm.^{2}	hr.	%	J./cm.^{2}
1	3·4	43	420	0·9	10	140	*9·4*	*87*	1780	6·1	47	1210	2·8	19	430	*13·9*	*86*	3060
2	5·6	71	760	···	···	···	*9·4*	86	*2070*	···	···	···	···	···	···	11·5	70	2480
3	1·2	15	110	···	···	···	3·8	35	540	0·6	5	70	9·0	61	2340	13·1	81	2340
4	1·8	23	250	···	···	···	···	···	···	2·1	16	190	3·4	23	510	8·0	49	1570
5	···	···	···	···	···	···	···	···	···	2·9	22	320	5·0	33	890	0·6	4	40
6	···	···	···	···	···	···	···	···	20	···	···	···	3·2	21	450	6·7	41	780
7	···	···	···	···	···	···	7·8	69	1460	6·0	44	1080	12·0	79	2370	5·8	35	1120
8	···	···	···	···	···	···	1·6	14	200	2·2	17	280	0·3	2	60	5·9	36	740
9	4·1	51	730	···	···	···	7·4	65	1520	10·4	77	1820	4·4	29	820	10·9	66	1720
10	···	···	···	···	···	···	···	···	···	10·0	74	1780	0·3	2	50	13·0	79	2970
11	···	···	···	···	···	···	···	···	···	11·1	82	2330	8·8	57	1800	7·0	43	1310
12	2·4	30	380	···	···	···	···	···	···	6·0	44	830	0·9	6	120	13·5	82	2920
13	4·6	56	550	···	···	···	···	···	···	10·7	78	1660	4·5	29	630	8·3	51	1680
14	···	···	···	···	···	···	···	···	···	8·3	60	1460	8·5	55	1730	1·2	7	60
15	···	···	···	···	···	···	···	···	···	2·2	16	320	8·8	56	1970	2·2	13	210
16	*6·0*	*72*	*1150*	···	···	···	1·9	16	360	9·3	67	2240	6·2	40	1000	5·6	34	890
17	4·0	48	650	···	···	···	3·4	29	620	9·4	67	1500	7·9	51	1100	13·4	81	*3200*
18	5·7	68	990	···	···	···	3·5	29	280	7·3	52	1370	···	···	···	2·0	12	210
19	···	···	···	···	···	···	0·3	3	20	1·5	11	210	1·1	7	160	9·7	58	1670
20	0·2	2	···	···	···	···	3·7	30	730	2·1	15	310	···	···	···	0·2	1	···
21	3·0	35	320	···	···	···	1·0	8	110	5·1	36	770	···	···	···	5·0	30	900
22	1·6	19	240	···	···	···	2·9	24	210	5·4	38	600	6·3	40	1250	7·3	44	1500
23	2·2	25	200	2·8	27	270	2·2	18	130	2·3	16	280	0·2	1	20	1·5	9	250
24	2·4	28	250	6·2	59	890	···	···	···	*11·9*	*83*	2490	8·8	55	1810	12·2	74	3060
25	···	···	···	1·1	10	320	6·7	54	1650	7·4	51	1700	9·2	58	1300	11·8	71	2920
26	···	···	···	*7·8*	*74*	*1880*	0·2	2	40	11·1	77	*2960*	7·8	49	1160	12·3	74	2380
27	0·7	8	80	···	···	10	0·3	2	20	5·6	38	1310	10·4	65	1710	4·5	27	850
28	0·3	3	20	0·1	1	···	0·2	2	20	6·4	44	1300	*14·3*	*89*	*3680*	5·0	30	670
29	5·1	58	620				0·1	1	40	8·5	58	1840	13·8	85	2960	4·0	24	550
30	0·3	3	60				0·7	5	50	2·6	18	380	13·3	82	2410	0·5	3	70
31	···	···	···				···	···	···				10·6	65	1960			
Mean	1·76		250	0·67		130	2·15		380	5·82		1090	5·86		1120	7·22		1400

	JULY			AUGUST			SEPTEMBER			OCTOBER			NOVEMBER			DECEMBER		
	Total for day	Per cent. of possible	Solar radiation	Total for day	Per cent. of possible	Solar radiation	Total for day	Per cent. of possible	Solar radiation	Total for day	Per cent. of possible	Solar radiation	Total for day	Per cent. of possible	Solar radiation	Total for day	Per cent. of possible	Solar radiation
	hr.	%	J./cm.^{2}	hr.	%	J./cm^2	hr.	%	J./cm.^{2}	hr.	%	J./cm.^{2}	hr.	%	J./cm.^{2}	hr.	%	J./cm.^{2}
1	1·2	7	120	6·4	42	1160	*10·7*	79	1620	8·5	73	1540	···	···	40	···	···	···
2	1·6	9	230	3·3	22	550	8·4	62	1490	3·1	27	330	···	···	···	1·4	17	230,
3	3·6	22	340	9·7	64	2420	7·1	53	1160	8·5	74	1600	*7·5*	80	*1610*	···	···	···
4	4·5	27	880	6·9	45	910	6·9	52	650	*8·7*	*76*	*1160*	···	···	···	···	···	···
5	7·9	48	910	0·2	1	40	10·4	78	1710	5·5	48	740	7·0	75	1400	0·3	4	···
6	3·5	21	380	4·8	32	390	9·8	74	2190	8·0	70	1340	···	···	50	0·9	11	80
7	9·2	56	2090	4·8	31	560	4·4	33	990	3·0	27	270	2·6	28	400	0·3	4	50
8	4·0	24	310	12·0	80	2320	3·6	28	300	0·3	3	···	4·8	52	660	0·4	5	50
9	5·4	33	820	11·7	79	1840	4·1	31	660	4·1	37	1000	0·4	4	60	0·6	8	40
10	0·3	2	20	4·8	32	570	9·3	72	1610	2·0	18	260	4·3	47	720	1·8	23	270
11	1·0	6	50	9·7	66	1690	9·6	75	*2290*	0·9	8	60	0·4	4	30	···	···	10
12	7·2	44	1590	10·0	68	1900	0·6	5	50	5·9	53	940	0·4	4	40	···	···	···
13	7·0	43	970	*12·4*	84	2360	1·5	12	160	2·0	19	170	1·7	19	490	0·1	1	···
14	3·1	19	340	9·6	66	1740	0·1	1	10	1·1	10	110	···	···	···	···	···	···
15	12·7	79	2120	12·0	82	2240	9·6	76	2040	4·9	46	810	1·9	21	310	···	···	···
16	5·9	37	860	12·1	83	2170	7·7	61	1310	···	···	···	2·2	25	300	0·1	1	···
17	0·3	2	30	10·0	76	1390	5·0	40	1060	0·3	3	40	4·4	50	640	0·3	4	10
18	1·8	11	130	*12·4*	86	2120	···	···	···	0·1	1	10	0·3	3	50	···	···	···
19	4·6	29	520	11·4	79	1700	0·7	6	90	4·8	40	880	···	···	···	0·3	4	20
20	8·3	52	1920	9·5	67	1610	2·0	16	180	1·0	10	130	···	···	···	···	···	···
21	0·5	3	70	7·5	53	920	6·7	55	1610	5·6	54	840	···	···	···	2·0	26	250
22	7·2	45	1100	9·1	64	1380	8·6	70	2060	1·1	11	120	···	···	···	0·2	3	20
23	6·9	44	1030	7·4	52	1260	3·5	29	430	4·6	45	670	2·1	25	290	0·4	5	50
24	7·0	44	1180	12·0	85	2610	5·9	49	1320	3·6	36	410	5·5	66	990	···	···	···
25	7·9	50	1630	10·1	72	1780	9·0	75	1230	4·4	44	500	6·8	*81*	1290	0·1	1	30
26	*13·1*	*84*	*3170*	9·0	65	1900	6·5	55	1170	5·6	56	900	6·6	80	1070	5·5	71	920
27	10·8	70	1490	*12·4*	*90*	2620	5·8	49	1180	2·2	22	330	0·2	2	50	···	···	···
28	6·9	44	980	11·9	89	2210	0·2	2	20	0·6	6	100	3·4	41	530	0·2	3	70
29	12·4	80	2330	8·6	63	1880	3·9	33	510	0·1	1	20	···	···	···	*6·4*	*82*	*1070*
30	2·5	16	150	5·0	36	450	9·8	*84*	2160	···	···	40	···	···	50	0·6	8	80
31	6·5	42	730	11·8	87	*2770*	···	···	···	0·1	1	10	···	···	···	1·8	23	410
Mean	5·64		920	8·98		1600	5·71		1040	3·25		500	2·08		370	0·76		120
									Annual Mean	4·16		743						

See Introduction for corrections to tabulated values of radiation.

DURATION OF BRIGHT SUNSHINE

Monthly and annual totals between exact hours, local apparent time

187 KEW OBSERVATORY: h_s (height of recorder above ground) = 13·3 m.

	Hour L.A.T. 3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	Total	per cent. of possible
	hours																			%
Jan.	–	–	–	–	...	2·0	9·0	11·2	*11·4*	8·2	8·0	4·4	0·4	...	–	–	–	–	54·6	21
Feb.	–	–	–	...	0·5	1·0	1·8	2·8	*3·3*	2·9	2·8	2·4	1·4	...	...	–	–	–	18·9	7
Mar.	–	–	...	0·4	4·5	5·5	6·4	7·5	*9·1*	7·5	7·6	7·9	5·2	4·0	0·9	...	–	–	66·5	19
Apr.	–	...	1·8	10·0	14·1	15·3	16·0	16·2	*17·3*	17·0	16·2	14·3	12·4	13·7	8·3	1·9	...	–	174 5	42
May	...	0·2	5·6	12·1	14·3	*16·5*	15·2	14·7	14·0	14·1	14·6	16·0	14·6	11·6	11·2	6·3	0·8	...	181·8	38
June	...	3·7	12·7	16·9	15·7	16·5	15·4	*17·0*	14·1	16·8	13·6	14·9	14·9	13·5	13·1	14·1	3·7	...	216·6	44
July	...	0·4	4·4	8·9	10·7	12·0	14·7	15·2	14·7	15·3	*16·7*	13·9	12·3	12·5	13·0	9·0	1·1	...	174·8	35
Aug.	...	...	1·8	10·6	19·4	23·3	24·6	*26·2*	25·6	25·6	25·0	23·4	24·3	21·9	20·7	6·1	...	–	278·5	63
Sept.	–	–	...	4·3	11·0	16·0	17·1	16·9	18·5	18·4	17·9	*18·8*	15·2	12·3	5·0	...	–	–	171·4	45
Oct.	–	–	–	...	0·2	4·5	8·5	13·5	*16·4*	14·5	13·8	13·0	11·3	4·9	...	–	–	–	100·6	30
Nov.	–	–	–	–	0·2	4·2	7·1	8·4	10·4	*11·4*	10·0	7·5	3·2	0·1	–	–	–	–	62·5	23
Dec.	–	–	–	–	–	0·7	2·9	5·1	*5·4*	4·6	3·1	1·9	...	...	–	–	–	–	23·7	10
Annual	...	4·3	26·3	63·2	90·6	117·5	138·7	154·7	*160·2*	156·3	149·3	138·4	115·2	94·5	72·2	37·4	5·6	...	1524 4	34

SOLAR RADIATION RECEIVED ON A SURFACE PERPENDICULAR TO THE SOLAR BEAM

Monthly and annual totals between exact hours, local apparent time

188 KEW OBSERVATORY: h_s = 13·3 m.

	Hour L.A.T. 3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	Total
	joules per square centimetre																		
Jan.	–	–	–	–	...	300	1090	1510	1770	1390	980	570	170	...	–	–	–	–	7780
Feb.	–	–	–	...	40	280	400	460	580	590	600	330	190	40	–	–	–	–	3510
Mar.	–	–	...	150	670	1180	1280	1510	1670	1430	1330	1260	780	480	130	...	–	–	11870
Apr.	–	...	380	1450	2300	2800	3170	3350	3700	3530	3400	2730	2090	2170	1230	310	...	–	32610
May	...	110	820	1550	2550	3520	3140	3420	3070	3070	3100	3240	2610	1890	1540	950	130	...	34710
June	...	460	1650	2950	2980	3640	3650	3620	2930	3390	3160	3510	2880	2750	2090	1910	560	...	42130
July	...	140	690	1170	1590	2010	2490	2310	2720	2900	3000	2100	2070	1950	1910	1240	220	...	28510
Aug.	...	...	310	1170	2220	3350	4240	5140	5550	5600	5290	4650	4600	3640	2720	970	40	...	49490
Sept.	–	...	50	860	1810	2880	3230	3670	3460	3690	3320	3200	2640	1670	790	20	...	...	31290
Oct.	–	–	...	20	240	690	1200	2060	2430	2400	2240	1970	1480	650	50	...	–	–	15430
Nov.	–	–	–	...	30	520	1170	1550	1980	2180	1790	1180	600	70	...	–	–	–	11070
Dec.	–	–	–	–	...	90	480	730	830	690	460	300	80	...	–	–	–	–	3660
Annual	...	710	3900	9320	14430	21260	25540	29330	30690	30860	28670	25040	20190	15310	10460	5400	950	...	272060

See Introduction for correction to tabulated values.

WIND

Mean speed and highest instantaneous speed recorded each day (0h. to 24h., G.M.T.) by the pressure-tube anemograph

189 KEW OBSERVATORY: h_a (height of anemograph above M.S.L.) = height of ground above M.S.L. + height of anemograph above ground = 5 m. + 23 m.

	JANUARY		FEBRUARY		MARCH		APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER		OCTOBER		NOVEMBER		DECEMBER	
	Mean	Max. gust	Mean	Max. gust	Mean	Max. gust	Mean	Max. gust	Mean	Max. gust	Mean	Max. gust	Mean	Max. gust	Mean	Max. gust	Mean	Max. gust	Mean	Max. gust	Mean	Max. gust	Mean	Max. gust
	metres per second																							
1	2·8	13	4·0	10	4·5	16	2·3	9	5·4	15	2·4	12	1·2	8	4·6	13	3·9	12	*0·5*	4	2·9	12	*0·9*	6
2	2·5	13	5·2	14	2·4	8	2·9	9	*9·2*	*21*	2·1	10	2·6	9	5·6	*16*	3·3	11	2·7	11	6·8	19	2·9	10
3	4·7	16	6·0	13	4·0	12	4·2	11	6·1	19	2·1	10	2·5	8	2·9	11	*0·9*	6	2·8	13	4·9	15	1·9	8
4	3·9	10	4·9	13	8·2	19	5·7	17	3·1	10	5·0	17	3·8	14	2·9	12	1·6	10	1·0	5	2·7	10	1·7	6
5	5·6	15	5·7	13	8·2	20	7·4	25	4·4	15	6·3	19	5·6	16	2·5	10	1·3	7	0·6	3	2·2	10	7·8	*26*
6	5·1	16	3·2	8	6·6	17	7·9	19	2·5	9	5·9	17	5·1	16	3·3	12	1·7	7	0·9	6	*0·3*	3	3·7	15
7	3·4	9	5·9	16	*2·1*	6	7·2	26	4·4	13	5·2	17	5·7	16	2·7	13	2·6	11	1·4	9	1·8	11	2·2	10
8	3·7	15	*8·8*	*20*	3·9	11	8·1	23	2·9	15	6·0	19	*6·9*	*19*	*1·0*	9	3·2	12	1·9	8	4·1	11	3·8	15
9	3·3	10	2·7	7	2·9	13	3·1	14	3·5	14	4·5	14	2·4	13	2·4	11	5·3	17	2·4	10	5·1	14	5·5	15
10	2·6	13	5·3	13	3·1	12	1·7	8	1·9	9	*1·1*	7	4·1	13	2·6	9	4·3	12	2·9	13	4·7	17	1·7	7
11	3·7	17	6·6	13	4·9	14	*1·4*	11	1·4	8	2·2	11	4·2	12	2·0	8	3·4	14	2·4	8	7·3	21	1·4	6
12	6·0	21	5·6	12	4·4	11	2·6	9	4·2	11	*6·3*	14	2·6	10	2·0	8	4·2	14	1·1	7	*8·3*	*23*	2·0	8
13	7·6	*26*	3·8	9	4·6	15	1·8	7	2·1	7	4·7	13	2·0	8	3·1	10	3·3	13	0·7	5	3·6	13	3·7	12
14	6·7	17	3·5	9	4·3	14	3·6	13	3·8	14	3·0	13	1·4	9	3·6	11	3·7	16	1·4	9	2·0	8	3·7	12
15	*8·7*	19	5·6	12	3·4	14	4·0	12	3·8	13	3·4	15	4·2	11	2·9	10	3·2	13	3·5	13	4·1	15	2·7	9
16	5·5	19	6·4	15	9·0	*33*	2·9	15	1·6	10	3·3	13	1·5	11	2·5	8	4·1	*18*	2·1	7	2·5	9	4·7	13
17	4·2	14	5·7	14	4·0	18	4·0	12	*1·2*	7	2·9	9	1·9	9	2·8	9	1·1	8	2·2	9	2·4	9	5·8	15
18	2·7	10	6·0	13	6·1	19	4·4	12	2·0	11	1·2	7	*0·9*	5	3·4	10	3·6	12	1·5	6	3·5	10	3·6	15
19	1·6	7	5·6	14	6·2	17	3·7	12	2·9	11	3·2	12	1·9	8	4·2	12	2·2	9	2·8	10	4·0	14	4·3	13
20	2·9	11	3·1	11	4·2	13	6·7	19	3·6	9	3·6	13	3·2	11	3·9	12	3·9	16	2·5	10	5·6	16	2·7	9
21	*0·5*	3	6·1	14	6·7	19	9·5	*26*	1·9	6	2·2	11	3·7	13	*6·5*	15	4·3	17	0·7	3	7·5	18	3·7	14
22	2·9	10	4·6	10	6·7	18	7·7	20	2·9	7	2·6	12	2·7	10	5·3	12	4·7	17	3·6	14	7·7	21	4·6	13
23	5·2	14	2·4	8	*9·1*	24	*10·3*	*32*	1·4	7	2·3	10	1·9	9	2·7	14	3·5	15	3·6	12	6·3	19	4·2	13
24	3·9	11	*1·1*	5	5·0	17	7·6	22	2·3	12	2·9	13	1·6	8	3·7	12	2·3	11	2·1	7	4·7	17	6·0	15
25	2·6	11	2·0	8	4·3	17	4·8	16	3·2	13	2·8	11	1·7	9	3·4	10	1·7	9	5·3	15	5·5	19	5·7	21
26	7·8	17	6·1	19	6·4	19	2·3	9	3·9	13	2·4	12	2·1	8	3·4	10	*6·2*	*18*	7·8	17	3·3	13	5·7	18
27	6·8	17	2·7	10	3·3	12	4·8	15	2·4	9	1·3	*24*	3·7	12	3·9	12	2·0	12	*8·0*	*20*	2·6	11	*8·2*	21
28	4·7	14	5·3	16	2·3	7	6·7	20	3·2	10	3·0	11	3·4	11	3·1	12	3·0	10	6·3	19	4·7	14	6·7	17
29	4·4	11			2·8	8	5·8	17	2·9	12	3·3	11	2·4	9	3·5	10	3·4	16	3·5	12	4·2	14	5·8	17
30	6·2	15			5·7	16	5·6	17	1·6	9	1·2	7	4·7	11	3·8	10	1·3	5	4·2	15	1·3	8	3·1	10
31	4·2	10			3·6	11			1·7	12			4·3	11	4·0	13			4·1	12			2·5	7

WIND

Monthly and annual means of mean wind speed between exact hours, G.M.T.

190 KEW OBSERVATORY: h_a = 5 m. + 23 m.

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	metres per second																								
Jan.	4·0	3·9	*3·8*	3·9	3·8	3·9	4·0	4·1	4·1	4·1	4·4	4·9	5·1	*5·3*	5·2	5·1	4·9	4·7	4·7	4·7	4·4	4·3	4·3	4·1	4·4
Feb.	4·3	4·4	4·6	4·7	4·7	4·7	4·6	4·8	4·9	5·0	4·9	4·9	5·1	*5·3*	5·0	5·2	5·1	5·1	5·0	4·9	4·7	4·4	*4·2*	4·3	4·8
Mar.	*4·0*	4·1	4·1	4·3	4·2	4·3	4·3	4·3	4·5	5·1	5·8	6·0	6·3	*6·4*	6·4	6·1	5·8	5·4	4·8	4·7	4·5	4·5	4·5	4·1	4·9
Apr.	3·8	3·5	3·5	*3·4*	3·6	3·6	3·9	4·6	5·2	5·9	6·3	6·5	6·4	6·6	*6·8*	6·7	6·3	6·1	5·6	5·1	4·9	4·4	4·1	3·7	5·0
May	2·3	2·1	2·2	2·1	2·1	*2·1*	2·1	2·5	3·3	3·5	4·1	4·3	4·3	4·3	*4·5*	4·2	4·2	3·9	3·5	3·1	3·0	2·8	2·6	2·2	3·1
June	2·1	1·9	*1·8*	1·9	1·9	2·2	2·8	3·1	3·5	4·0	4·2	4·5	4·7	*4·8*	4·7	4·7	4·6	4·2	4·0	3·4	2·7	2·5	2·4	2·3	3·3
July	*2·3*	2·3	2·3	2·4	2·3	2·3	2·6	2·8	3·1	3·2	3·4	3·5	3·9	4·0	*4·1*	3·8	3·9	4·0	3·5	3·2	2·9	2·9	2·7	2·5	3·1
Aug.	2·3	2·4	2·3	2·3	2·4	2·4	2·7	3·3	3·6	3·8	4·3	4·5	4·6	*4·8*	4·7	4·6	4·5	4·4	3·7	3·0	2·8	2·6	2·5	*2·3*	3·4
Sept.	2·3	*2·1*	2·2	2·2	2·2	2·1	2·2	2·5	3·2	3·7	4·2	4·3	4·5	*4·7*	4·7	4·6	4·2	3·6	3·1	2·9	2·5	2·3	2·2	2·2	3·1
Oct.	2·1	2·1	2·0	*1·9*	2·1	2·1	2·1	2·1	2·3	3·0	3·7	4·1	*4·3*	4·1	4·0	3·9	3·6	3·1	2·8	2·6	2·5	2·4	2·2	2·3	2·8
Nov.	*3·3*	3·5	3·8	3·7	3·9	3·8	4·0	3·9	4·1	4·4	5·0	5·4	5·5	*5·6*	5·2	4·8	4·5	4·0	4·0	3·9	3·7	3·6	3·5	3·3	4·2
Dec.	*3·6*	3·7	3·8	3·8	3·7	3·7	3·9	3·9	3·7	4·1	4·2	4·5	*4·7*	4·6	4·3	4·0	3·9	4·0	3·7	3·9	3·9	4·0	3·6	3·7	4·0
Annual	3·0	*3·0*	3·0	3·0	3·1	3·1	3·3	3·5	3·8	4·1	4·5	4·8	4·9	*5·0*	5·0	4·8	4·6	4·4	4·0	3·8	3·5	3·4	3·2	3·1	3·8

DISTRIBUTION OF WIND SPEED, EXTREME VELOCITIES AS RECORDED BY PRESSURE-TUBE ANEMOGRAPH

191 KEW OBSERVATORY: h_a = 5 m. + 23 m.

	DISTRIBUTION OF WIND SPEED								EXTREME VELOCITIES				
	More than 17·1 m./sec.		10·8 to 17·1 m./sec.		5·5 to 10·7 m./sec.	1·6 to 5·4 m./sec.	Less than 1·6 m./sec.	No record	Highest hourly wind			Highest gust	
	Dates of occurrence	Duration	No. of days	Duration	Duration	Duration	Duration	Duration	Veer from N.	Speed	Hour ended	Speed	Date
		hr.		hr.	hr.	hr.	hr.	hr.	°	m./sec.	day h.	m./sec.	day h. m.
Jan.	–	0	2	5	218	422	99	0	240	13	13 14	26	13 11 45
Feb.	–	0	1	3	254	363	52	0	70	11	8 06	20	8 05 30
Mar.	–	0	4	18	272	402	52	0	260	15	16 21	33	16 19 40
Apr.	–	0	6	39	257	332	92	0	220	15	23 18	32	23 15 25
May	–	0	1	1	106	456	181	0	55	11	2 21	21	2 14 05
June	–	0	0	0	135	378	207	0	225	10	5 14	24	27 11 15
July	–	0	0	0	87	483	174	0	220	10	8 15	19	8 16 50
Aug.	–	0	0	0	85	547	112	0	60	9	21 13	16	2 15 40
Sept.	–	0	0	0	105	421	194	0	40	10	26 15	18	16 15 45) 26 14 15)
Oct.	–	0	0	0	108	344	292	0	65	10	27 12	20	27 11 45
Nov.	–	0	1	2	207	408	103	0	220	12	22 12	23	12 01 30
Dec.	–	0	1	2	161	483	98	0	225	12	5 14	26	5 14 05
Year	–	0	16	70	1995	5039	1656	0	260) 220)	15	Mar. 16 21 Apr. 23 18	33	Mar. 16 19 40

TEMPERATURE IN THE GROUND AT DEPTHS OF 30 CM.(1ft.) AND 122 CM.(4ft.) AT 9h., G.M.T.

192 KEW OBSERVATORY

	JANUARY		FEBRUARY		MARCH		APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER		OCTOBER		NOVEMBER		DECEMBER	
	30 cm.	122 cm.	30 cm.	122 cm.	30 cm.	122 cm.	30 cm.	122 cm.	30 cm.	122 cm.	30 cm.	122 cm.	30 cm.	122 cm.	30 cm.	122 cm.	30 cm.	122 cm.	30 cm.	122 cm.	30 cm.	122 cm.	30 cm.	122 cm.
	degrees Absolute																							
1	76·0	79·3	74·0	78·3	73·2	77·1	80·0	79·1	83·0	82·1	92·0	85·2	91·2	87·9	93·0	89·7	91·2	90·0	85·8	88·1	81·9	85·1	76·5	82·8
2	76·0	79·3	74·0	78·2	73·2	77·0	80·6	79·1	82·3	82·1	93·0	85·6	91·1	88·0	92·6	89·6	91·4	90·0	85·7	88·0	83·4	85·1	76·2	83·5
3	75·5	79·3	74·0	78·1	73·1	77·0	79·7	79·2	82·1	82·1	93·5	85·9	91·6	88·1	92·3	89·6	90·8	89·9	85·8	87·9	83·1	85·0	76·1	83·2
4	75·9	79·2	74·0	78·1	73·2	76·9	80·0	79·3	83·6	82·1	93·2	86·1	91·6	88·1	92·9	89·7	91·2	89·9	85·0	87·8	82·6	84·9	76·9	82·1
5	75·5	79·2	74·0	78·1	73·1	76·9	79·1	79·3	83·2	82·1	92·0	86·3	91·6	88·1	92·2	89·6	91·0	89·9	84·7	87·5	83·3	85·0	77·8	82·0
6	75·1	79·1	74·0	78·1	73·2	76·9	80·3	79·5	83·8	82·1	89·3	86·5	90·2	88·2	91·6	89·7	91·2	89·8	84·6	87·3	82·1	84·9	78·5	81·8
7	75·0	79·1	74·0	77·9	73·4	77·0	80·4	79·6	84·3	82·1	88·8	86·7	90·1	88·4	91·2	89·7	91·0	89·7	85·1	87·1	81·8	84·9	78·9	81·8
8	75·1	79·1	73·9	77·9	73·2	76·7	81·3	79·7	85·5	82·1	88·7	86·7	90·0	88·1	90·6	89·5	91·2	89·7	85·9	87·0	82·8	84·8	78·6	81·8
9	76·0	79·1	74·0	77·8	73·4	76·8	80·3	79·9	85·3	82·3	88·6	86·7	89·5	88·1	91·1	89·3	91·1	89·6	85·7	87·0	83·6	84·7	78·7	81·7
10	75·5	79·0	74·0	77·9	73·2	76·7	79·9	79·9	86·2	82·3	88·5	86·8	89·2	88·1	91·1	89·3	90·5	89·6	86·5	87·0	83·9	84·6	78·8	81·7
11	76·1	78·9	74·0	77·8	73·2	76·4	80·6	80·0	85·3	82·7	89·7	86·7	89·0	88·1	91·0	89·3	90·6	89·6	86·5	86·9	83·7	84·7	77·7	81·3
12	76·9	79·0	73·9	77·7	73·2	76·2	81·0	80·1	86·3	82·9	89·6	86·7	89·1	88·1	91·4	89·5	91·2	89·5	86·6	86·9	84·4	84·6	78·4	81·5
13	77·8	79·0	73·9	77·6	73·4	76·3	81·0	80·2	86·7	83·0	89·0	86·7	89·9	88·1	91·6	89·3	90·9	89·4	86·2	86·9	83·8	84·7	79·2	81·3
14	77·1	79·0	73·8	77·4	74·5	76·3	81·6	80·2	88·0	83·2	88·8	86·5	91·4	88·0	91·6	89·2	89·6	89·3	86·2	87·0	82·4	84·7	79·4	81·4
15	78·9	79·0	73·8	77·4	74·0	76·3	83·0	80·2	87·9	83·3	88·2	86·7	92·0	88·0	92·3	89·2	90·0	89·3	85·9	85·9	81·9	84·9	76·9	81·3
16	79·0	79·1	73·8	77·4	74·0	76·3	83·0	80·3	87·4	83·6	87·8	86·7	92·4	88·1	92·6	89·3	90·9	89·3	85·8	86·9	80·3	84·8	79·3	81·5
17	79·0	79·1	73·8	77·4	75·9	76·3	83·4	80·6	86·8	83·8	88·9	86·7	92·7	88·1	93·3	89·4	89·5	89·2	85·6	86·8	79·3	84·4	79·3	81·3
18	78·0	79·3	73·8	77·3	77·2	76·3	83·5	80·9	86·5	83·9	90·0	86·6	92·1	88·2	93·8	89·5	89·7	89·1	85·6	86·6	79·1	84·1	79·6	81·4
19	77·2	79·3	73·7	77·2	78·0	76·6	84·0	80·9	86·1	84·0	90·0	86·5	92·3	88·3	93·8	89·6	90·1	89·2	84·7	86·7	79·0	83·9	79·6	81·4
20	77·0	79·3	73·7	77·3	78·4	77·0	83·1	81·1	86·0	84·1	90·0	86·6	92·1	88·5	93·0	89·8	90·5	89·1	84·2	86·6	79·8	83·7	79·9	81·4
21	76·8	79·3	73·4	77·3	79·2	77·1	83·0	81·3	85·6	84·1	89·6	86·8	92·2	88·7	93·2	89·9	90·0	89·1	82·9	86·4	82·3	83·6	79·6	81·5
22	75·9	79·3	73·4	77·1	79·2	77·2	82·9	81·3	85·7	84·1	90·0	87·0	92·3	88·7	93·1	90·0	88·8	89·1	83·2	86·3	83·8	83·5	79·9	81·5
23	75·6	79·3	73·5	77·1	79·8	77·7	82·7	81·3	86·0	84·1	89·7	87·0	92·3	88·8	92·9	89·9	88·8	89·1	84·0	86·1	84·1	83·5	79·9	81·4
24	75·0	79·2	73·4	77·1	79·3	78·0	82·2	81·4	85·9	84·1	89·3	87·1	92·0	89·0	92·6	90·0	87·2	89·1	83·3	86·1	82·8	83·6	80·0	81·4
25	74·8	79·1	73·2	77·1	77·9	78·1	82·8	81·4	87·2	84·1	90·6	87·1	92·6	89·0	92·2	90·0	86·3	89·1	83·9	85·9	81·5	83·8	80·7	81·5
26	74·7	79·0	73·2	77·1	78·2	78·2	83·7	81·5	87·9	84·1	91·3	87·1	93·8	89·1	92·4	90·0	87·0	88·9	83·6	85·9	79·8	83·9	80·0	81·4
27	74·3	79·0	73·2	77·1	78·8	78·3	84·0	81·7	88·1	84·2	92·8	87·1	94·0	89·1	92·7	90·0	86·9	88·6	83·0	85·7	78·0	83·7	80·0	81·6
28	74·1	79·0	73·2	77·1	79·8	78·3	84·0	81·9	88·8	84·5	91·9	87·3	94·6	89·2	92·3	90·1	87·2	88·3	82·9	85·7	77·8	83·4	80·6	81·7
29	74·0	78·7			80·4	78·4	83·9	82·0	89·8	84·7	92·0	87·4	94·3	89·4	92·0	90·1	87·8	88·2	82·7	85·4	77·7	83·2	79·4	81·7
30	74·0	78·6			81·1	78·7	83·9	82·0	90·9	84·9	91·8	87·8	94·2	89·4	92·0	90·1	86·7	88·2	81·5	85·4	77·4	83·0	78·1	81·6
31	73·9	78·3			80·8	79·0			91·2	85·1			93·2	89·7	91·8	90·1			82·1	85·2			77·0	81·5
Mean	76·0	79·1	73·7	77·6	76·1	77·2	82·0	80·5	86·8	83·4	90·3	86·7	91·8	88·5	92·3	89·7	89·7	89·3	84·7	86·7	81·6	84·3	78·8	81·7
											Year		83·6	83·7										

MINIMUM TEMPERATURE "ON THE GRASS" DURING THE INTERVAL 18h. TO 7h., G.M.T.

193 KEW OBSERVATORY

	JANUARY	FEBRUARY	MARCH	APRIL	MAY	JUNE	JULY	AUGUST	SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER
	degrees Absolute											
1	66·9	61·9	65·4	70·8	74·7	82·9	83·4	82·4	78·0	70·8	69·8	*63·0*
2	70·4	69·5	62·4	72·0	75·7	84·9	85·8	88·5	83·0	73·1	81·9	66·7
3	66·5	73·6	*60·8*	75·3	78·6	85·2	84·2	84·7	76·8	72·6	77·0	67·1
4	72·3	75·3	71·6	77·4	82·3	84·2	81·7	84·2	85·0	70·4	73·1	74·9
5	70·7	71·1	71·9	71·0	*72·0*	85·2	86·2	83·6	78·5	71·4	81·9	70·7
6	70·8	69·7	71·8	80·3	74·1	79·2	79·8	85·3	82·3	72·4	71·2	76·4
7	70·6	70·7	61·2	77·8	76·8	82·0	85·0	79·0	78·8	76·3	75·3	77·2
8	73·0	70·7	65·7	79·7	82·8	80·2	81·5	*75·2*	88·0	79·1	80·9	73·6
9	73·5	71·3	67·4	67·9	76·4	82·5	81·9	77·6	75·3	74·2	81·1	75·0
10	65·9	74·0	72·9	*65·6*	80·4	*73·9*	82·3	79·1	84·8	78·5	81·9	70·6
11	73·7	71·4	73·6	68·2	72·4	75·8	83·6	78·3	77·4	79·7	80·8	66·3
12	74·7	69·2	72·4	69·8	78·0	82·8	78·8	80·7	87·5	77·0	86·3	77·0
13	76·3	69·8	73·7	68·9	82·5	78·5	84·4	78·7	84·7	77·2	77·6	77·6
14	73·6	70·9	74·0	70·2	82·4	81·3	85·2	81·2	77·9	78·9	72·0	77·8
15	81·1	72·0	65·2	82·5	78·5	80·8	86·5	84·2	85·8	70·2	77·5	69·7
16	77·4	69·9	72·8	73·1	75·8	75·3	84·2	82·5	82·7	85·3	68·5	77·0
17	76·2	69·4	70·8	72·3	73·1	81·4	88·2	84·1	75·8	76·9	69·0	78·2
18	68·3	69·7	74·0	78·0	72·4	81·5	88·9	85·8	83·6	79·2	69·1	79·3
19	69·7	70·2	78·1	77·3	79·7	80·6	85·2	88·3	87·8	71·8	75·2	78·1
20	68·3	69·6	78·0	73·0	80·3	83·1	85·8	83·7	88·4	72·4	72·3	79·7
21	67·7	70·1	79·8	78·9	81·1	82·2	86·4	87·7	84·2	68·1	86·8	71·3
22	66·4	68·6	76·2	79·8	82·1	80·8	87·4	88·3	76·3	73·3	87·2	80·2
23	69·4	63·1	79·7	77·2	79·2	76·8	82·0	86·9	80·3	79·4	85·1	79·1
24	67·5	*57·0*	75·4	79·0	75·9	75·9	*78·7*	81·7	72·8	72·1	74·7	79·0
25	63·0	57·4	69·2	73·8	78·6	81·8	84·2	83·5	*70·7*	80·3	74·4	79·9
26	69·2	70·7	73·9	77·9	79·7	79·1	87·8	84·2	81·3	78·5	66·8	73·9
27	69·7	69·6	78·0	68·9	78·7	88·6	84·8	81·8	77·4	79·6	64·0	77·1
28	68·4	72·4	77·9	80·7	75·0	83·9	89·9	83·0	80·2	80·2	69·6	79·1
29	*56·9*		79·7	74·4	80·3	87·9	88·9	80·6	85·3	78·6	72·4	71·3
30	59·1		80·5	78·1	84·2	85·3	87·3	81·3	*70·7*	*67·9*	*66·4*	70·9
31	67·9		76·3		80·7		87·4	81·2		78·5		65·4
Mean	69·8	69·2	72·6	74·7	78·2	81·5	84·8	82·8	80·7	75·6	75·7	74·3
						Year	76·7					

The initial 2 or 3 of the readings is omitted, i.e. 275·0 degrees is printed 75·0

The minimum "on the grass" refers to the interval from 18h. on the previous day to 7h. on the day to which it is entered.

Add 0·16° to obtain temperature in degrees Kelvin where $T(°K.) = t(°C.) + 273·16$.

ELECTRICAL OBSERVATIONS, UNDERGROUND LABORATORY, WILSON METHOD

Mean value for periods of twenty minutes about 14h. 30m.

F = Potential gradient, unit 1 v./cm. $\lambda+$ = Conductivity due to positive ions, unit 10^{-15} ohms/cm.
i = Air-earth current, unit 10^{-15} amp./cm.^{2}

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	JANUARY			FEBRUARY			MARCH			APRIL			MAY			JUNE		
	F	$\lambda+$	i	F	$\lambda+$	i	F	$\lambda+$	i	F	$\lambda+$	i	F	$\lambda+$	i	F	$\lambda+$	i
1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
2	5·64	11	64	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
3	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
4	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
5	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
6	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
7	...	...	...	...	...	...	3·56	28	99	...	...	...	1·42	59	84	...	...	...
8	1·76	27	48	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
9	6·53	7	48	...	...	...	...	...	...	2·89	30	88	1·63	77	126	1·28	72	94
10	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1·09	36	40
11	...	...	...	...	...	...	3·15	15	48	...	...	...	...	...	...	...	...	...
12	...	...	...	6·59	15	101	...	...	...	...	...	...	4·03	16	65	3·16	52	166
13	...	...	...	6·43	10	65	...	...	...	...	...	...	...	...	...	2·53	48	123
14	...	...	...	...	...	...	1·93	41	78	2·79	36	102	...	...	...	...	...	...
15	...	...	...	...	...	...	...	...	...	2·27	44	97	...	...	...	...	...	...
16	4·49	23	106	...	...	...	...	...	...	...	...	...	...	...	...	0·90	78	70
17	3·65	29	106	5·52	17	93	3·34	46	154	4·78	30	145	0·79	52	41	1·51	85	128
18	...	...	...	6·21	18	113	...	...	...	3·02	17	50	...	...	...	...	...	...
19	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1·15	70	81
20	4·33	19	83	...	...	...	3·96	16	65	...	...	...	0·88	–	–	...	...	...
21	3·64	16	58	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
22	...	...	...	...	...	...	...	...	...	...	...	...	4·76	22	105	...	...	...
23	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1·43	36	51
24	...	...	...	6·60	11	70	...	...	...	2·15	21	46	...	...	...	1·33	68	91
25	...	...	...	6·52	7	46	2·79	29	82	2·82	45	127	...	...	...	1·21	53	64
26	...	...	...	5·21	26	138	...	...	...	...	...	...	...	...	...	1·47	71	104
27	...	...	...	...	...	...	3·24	25	82	...	...	...	...	...	...	...	...	...
28	...	...	...	...	...	...	4·86	6	27	1·60	37	60	1·99	–	–	...	...	...
29	...	...	...	...	...	...	...	...	...	2·12	–	–	1·25	44	55	...	...	...
30	...	...	...				...	...	...	...	...	...	1·03	54	55	...	...	...
31	...	...	...				...	...	...				...	...	...			
Mean	4·29	19	73	6·15	15	89	3·35	26	79	2·72	33	89	1·98	46	76	1·55	61	92
No. of days used	7	7	7	7	7	7	8	8	8	9	8	8	9	7	7	11	11	11

	JULY			AUGUST			SEPTERBER			OCTOBER			NOVEMBER			DECEMBER		
	F	$\lambda+$	i	F	$\lambda+$	i	F	$\lambda+$	i	F	$\lambda+$	i	F	$\lambda+$	i	F	$\lambda+$	i
1	1·77	50	89	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
3	1·74	84	147	...	...	...	0·98	93	91	...	...	...	...	...	...	...	...	...
4	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
5	...	...	...	...	...	...	0·90	83	75	...	...	...	2·89	30	86	...	...	...
6	...	...	...	...	...	...	...	...	...	2·44	67	164	...	...	...	...	...	...
7	...	...	...	1·55	58	90	...	...	...	...	...	...	...	...	...	...	...	...
8	2·21	88	196	1·64	23	38	1·15	69	81	...	...	...	...	...	...	...	...	...
9	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
10	...	...	...	...	...	...	1·35	74	99	...	...	...	3·46	27	94	4·72	–	–
11	1·60	47	75	1·96	33	64	...	...	...	...	...	...	...	...	...	...	...	...
12	...	...	...	2·52	29	72	...	...	...	...	...	...	...	...	...	1·70	26	44
13	...	...	...	...	...	...	...	...	...	3·70	41	152	...	...	...	...	...	...
14	...	...	...	4·00	...	...	...	...	...	3·44	37	127	...	...	...	...	...	...
15	3·00	24	73	...	...	...	1·68	81	137	...	...	...	...	...	...	6·35	14	89
16	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1·73	23	40
17	1·60	32	52	...	...	...	...	...	...	2·87	48	137	3·80	18	71	...	...	...
18	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
19	1·32	52	68	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
20	...	...	...	2·41	65	157	...	...	...	...	...	...	...	...	...	...	...	...
21	1·81	50	90	...	...	...	...	...	...	2·26	33	74	...	...	...	...	...	...
22	...	...	...	3·34	46	154	...	...	...	...	...	...	...	...	...	3·04	32	98
23	...	...	...	...	...	...	2·94	44	126	...	...	...	...	...	...	3·39	29	98
24	2·02	47	95	...	...	...	...	...	...	...	...	...	3·62	30	110	...	...	...
25	...	...	...	1·97	59	117	...	...	...	...	...	...	3·52	33	115	...	...	...
26	...	...	...	...	...	...	2·84	53	150	...	...	...	4·70	17	78	...	...	...
27	...	...	...	...	...	...	...	...	...	5·16	27	138	...	...	...	...	...	...
28	2·18	50	110	...	...	...	...	...	...	...	...	...	4·16	7	29	...	...	...
29	...	...	...	2·65	73	194	2·33	56	131	...	...	...	...	...	...	4·53	18	82
30	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
31	...	...	...	...	...	...	...	...	...	2·67	36	96	...	...	...	...	...	...
Mean	1·93	52	99	2·45	48	111	1·77	69	111	3·22	41	127	3·74	23	83	3·64	24	75
No. of days used	10	10	10	9	8	8	8	8	8	7	7	7	7	7	7	7	6	6

Year:				
	Mean	2·92	39	93
	No. of days used	99	94	94

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	JANUARY		FEBRUARY		MARCH		APRIL		MAY		JUNE	
	Character	Duration of negative potential gradient	Character	Duration of negative potential gradient	Character	Duration of negative potential gradient	Character	Duration of negative potential gradient	Character	Duration of negative potential gradient	Character	Duration of negative potential gradient
		hr.		hr.		hr.		hr.		hr.		hr.
1	0	...	0	...	0	...	0	...	2	3·4	0	...
2	1	1·8	2	5·7	0	...	2	4·9	1	0·9	0	...
3	0	...	2	11·9	0	...	1	2·7	2	3·1	0	...
4	0	...	1	1·2	1	2·2	2	11·0	2	6·7	1	1·3
5	0	...	1	0·1	2	5·6	2	5·5	1	0·9	1	0·8
6	0	...	0	...	2	5·2	1	0·9	1	1·9	1	1·2
7	2	5·4	0	...	0	...	1	0·9	0	...	1	1·4
8	2	5·9	1	0·9	1	0·5	1	0·4	1	1·1	1	1·7
9	0	...	0	...	1	1·6	0	...	0	...	0	...
10	2	4·7	1	1·5	2	4·3	1	0·2	1	0·7	0	...
11	1	1·1	0	...	2	7·7	0	...	0	...	0	...
12	1	2·4	0	...	2	6·3	0	...	0	...	0	...
13	1	0·2	0	...	2	8·6	0	...	2	3·3	0	...
14	1	0·7	1	1·8	1	1·4	0	...	1	1·1	2	7·7
15	0	...	1	0·2	2	5·0	0	...	1	1·3	2	4·6
16	0	...	0	...	2	6·7	0	...	2	3·0	0	...
17	1	0·7	0	...	1	0·4	1	0·7	0	...	0	...
18	0	...	0	...	1	0·5	1	0·1	1	2·6	1	0·1
19	0	...	1	0·6	2	4·6	1	0·2	0	...	0	...
20	0	...	1	0·2	1	0·2	1	0·2	0	...	1	0·1
21	1	0·3	1	1·9	2	3·2	0	...	0	...	1	2·3
22	0	...	1	0·4	1	2·9	1	2·8	0	...	0	...
23	0	...	0	...	1	1·5	2	5·6	1	2·8	0	...
24	1	0·6	1	0·1	1	2·2	1	0·1	1	0·2	0	...
25	1	2·9	0	...	0	...	0	...	1	0·5	0	...
26	1	2·6	0	...	2	4·9	0	...	1	1·4	1	0·1
27	1	0·6	1	0·7	2	5·1	0	...	0	...	1	1·8
28	1	0·9	1	2·8	1	1·4	1	0·1	0	...	1	2·4
29	0	...			2	8·4	1	1·8	0	...	1	0·3
30	0	...			1	2·2	1	2·5	1	1·3	1	2·4
31	1	2·2			2	3·9			0	...		
Total	-	33·0	-	30·0	-	97·5	-	40·6	-	36·2	-	28·2
No. of days used	-	31	-	28	-	31	-	30	-	31	-	30
Mean	-	1·1	-	1·1	-	3·1	-	1·3	-	1·2	-	0·9

	JULY		AUGUST		SEPTEMBER		OCTOBER		NOVEMBER		DECEMBER	
	Character	Duration of negative potential gradient	Character	Duration of negative potential gradient	Character	Duration of negative potential gradient	Character	Duration of negative potential gradient	Character	Duration of negative potential gradient	Character	Duration of negative potential gradient
		hr.		hr.		hr.		hr.		hr.		hr.
1	1	1·7	1	0·7	0	...	0	...	0	...	0	...
2	0	...	1	2·4	0	...	0	...	1	1·0	0	...
3	0	...	0	...	1	0·7	0	...	1	1·0	1	2·4
4	1	0·6	0	...	0	...	0	...	0	...	2	3·2
5	0	...	1	1·9	1	0·1	0	...	0	...	2	9·1
6	0	...	0	...	0	...	1	0·8	0	...	2	4·6
7	1	0·1	0	...	0	...	0	...	0	...	1	1·3
8	1	1·3	0	...	0	...	0	...	0	...	2	5·9
9	1	2·1	0	...	1	0·4	0	...	1	0·3	1	0·4
10	1	0·7	0	...	0	...	1	0·1	1	0·9	1	0·6
11	1	0·1	0	...	0	...	0	...	0	...	1	0·5
12	0	...	1	0·1	0	...	0	...	1	2·8	0	...
13	0	...	0	...	1	0·1	0	...	0	...	1	1·1
14	1	1·1	0	...	0	...	1	0·5	2	4·3	1	0·4
15	0	...	0	...	0	...	0	...	1	1·3	1	0·6
16	1	2·3	0	...	1	0·3	0	...	0	...	2	4·4
17	2	3·9	0	...	0	...	0	...	0	...	2	10·0
18	2	4·2	0	...	1	2·7	0	...	1	0·6	2	6·1
19	1	0·6	0	...	1	2·7	0	...	1	0·5	2	6·0
20	0	...	1	0·5	1	1·6	1	1·3	0	...	1	0·1
21	0	...	0	...	1	0·1	1	0·1	1	0·1	0	...
22	0	...	0	...	1	0·7	1	1·2	0	...	0	...
23	1	1·0	1	2·5	1	0·7	1	1·0	0	...	0	...
24	0	...	0	...	0	...	1	0·2	0	...	1	0·7
25	0	...	0	...	0	...	0	...	1	0·1	2	4·9
26	0	...	0	...	0	...	0	...	0	...	1	2·8
27	0	...	0	...	0	...	0	...	2	3·5	2	4·5
28	1	1·3	0	...	0	...	0	...	2	4·2	1	1·4
29	1	0·7	0	...	0	...	0	...	2	3·0	0	...
30	1	0·4	0	...	0	...	0	...	0	...	1	0·2
31	0	...	0	...			0	...			1	0·2
Total	-	22·1	-	8·1	-	10·1	-	5·2	-	23·6	-	71·4
No. of days used	-	31	-	31	-	30	-	31	-	30	-	31
Mean	-	0·7	-	0·3	-	0·3	-	0·2	-	0·8	-	2·3

Annual values: Character 0 1 2
No. of days used 178 141 46

Duration: Total 406·0
No. of days 365
Mean 1 11 hr.

POTENTIAL GRADIENT (reduced to level surface, Paddock site)
Kelvin electrograph standardised by Wilson readings, underground laboratory
Mean values for periods of sixty minutes between exact hours, G.M.T.

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	JANUARY, factor 4·28				FEBRUARY, factor 4·13				MARCH, factor 4·08			
	2-3h.	8-9h.	14-15h.	20-21h.	2-3h.	8-9h.	14-15h.	20-21h.	2-3h.	8-9h.	14-15h.	20-21h.
	volts per metre											
1	515	925	770	605	175	645	630	645	525	785	355	820
2	-255	965	615	450	25	25	-445	460	540	770	305	465
3	885	565	500	460	10	-250	-495	395	615	820	635	710
4	220	360	205	655	-25	610	545	545	380	365	465	160
5	165	255	590	320	310	410	620	680	-235	320	415	245
6	205	410	630	615	495	545	535	570	-10	-50	195	455
7	540	310	140	570	210	385	445	495	550	835	320	660
8	155	320	140	-345	370	410	580	-470	380	75	615	760
9	360	615	695	785	580	510	720	535	515	330	295	345
10	680	975	-515	-425	385	620	235	520	930	625	540	295
11	255	875	320	475	200	385	595	520	50	-210	185	195
12	360	320	540	-130	250	485	560	485	220	345	-50	295
13	165	385	410	450	300	610	770	630	-280	-305	-195	415
14	370	190	230	335	495	730	-110	250	490	125	145	735
15	140	310	255	640	260	395	595	545	845	650	145	Z-
16	270	640	460	370	460	385	485	370	-295	235	295	220
17	180	655	345	615	160	385	560	610	270	500	330	320
18	525	655	400	490	385	795	570	620	330	305	255	355
19	460	435	515	550	260	150	260	325	135	-100	0	365
20	410	500	425	745	420	795	830	520	195	415	110	210
21	490	295	370	385	335	420	705	-125	160	145	210	390
22	670	795	695	760	75	335	395	670	170	220	330	280
23	580	1030	730	820	495	495	485	895	75	145	235	365
24	605	425	695	105	250	660	670	830	220	125	145	430
25	425	450	900	0	705	990	645	445	525	550	255	465
26	230	0	-25	370	110	370	485	695	195	-430	280	210
27	220	435	550	670	660	1020	460	485	125	220	255	-10
28	140	255	180	640	0	100	150	160	345	-550	490	615
29	500	565	590	875					-10	110	345	-565
30	605	425	900	845					10	100	220	480
31	540	Z-	615	670					195	35	60	480
(a)	395	511	497	535	311	506	541	535	346	366	291	419
(b)	369	511	442	447	299	479	446	475	244	229	268	372
Mean	(a) 485		(b) 442		(a) 473		(b) 425		(a) 355		(b) 278	

	APRIL, factor 4·00				MAY, factor 3·90				JUNE, factor 3·82			
	2-3h.	8-9h.	14-15h.	20-21h.	2-3h.	8-9h.	14-15h.	20-21h.	2-3h.	8-9h.	14-15h.	20-21h.
	volts per metre											
1	325	490	275	430	150	280	305	290	205	240	115	205
2	155	230	250	130	280	140	280	165	125	300	135	160
3	Z±	560	530	290	-25	350	150	680	185	345	80	170
4	-670	-360	155	110	0	655	140	185	310	25	135	220
5	275	325	230	-385	330	260	235	245	125	250	185	-55
6	120	190	95	455	305	130	220	505	135	-45	70	125
7	170	0	180	290	445	260	140	330	220	-10	230	185
8	120	145	250	350	330	270	290	420	115	150	-320	150
9	370	470	290	490	455	550	305	220	135	185	70	205
10	170	325	215	215	220	400	185	420	250	390	115	115
11	240	395	275	700	470	350	105	330	135	330	320	135
12	130	540	370	575	200	385	330	330	115	365	345	285
13	215	410	230	350	Z-	420	280	630	380	435	240	90
14	325	410	300	335	330	220	165	245	45	185	-45	285
15	190	215	215	385	235	260	130	210	-220	205	115	300
16	300	530	240	430	270	270	Z±	235	230	195	115	230
17	275	180	335	300	200	375	220	130	170	205	160	205
18	205	385	430	155	165	150	25	-25	205	220	45	170
19	170	240	85	300	175	185	165	140	265	250	125	310
20	265	240	445	230	140	210	140	200	90	205	195	300
21	180	240	130	230	165	435	305	235	170	300	220	220
22	95	240	215	385	10	400	445	525	185	250	135	105
23	180	170	-350	205	200	315	35	375	170	240	105	220
24	170	335	250	290	115	350	140	185	300	150	135	170
25	-	310	325	335	35	185	130	350	135	195	125	160
26	85	240	205	250	140	185	140	245	185	205	185	185
27	35	300	190	85	175	220	115	235	135	320	205	230
28	145	240	170	190	140	220	150	260	410	400	Z-	355
29	230	275	205	120	235	470	140	185	80	205	125	160
30	0	155	215	530	280	445	-	315	160	265	185	Z-
31					330	820	150	350				
(a)	190	306	252	315	225	328	192	306	185	250	157	202
(b)	160	270	217	290	214	323	189	286	164	225	132	187
Mean	(a) 266		(b) 234		(a) 263		(b) 253		(a) 199		(b) 177	

The potential gradient is reckoned as positive if the potential increases upwards. For indeterminate potential gradient the following notation is used: Z+, indeterminate, positive value: Z-, indeterminate, negative value; Z±, indeterminate, in magnitude and sign.

(a) Mean of all positive readings.

(b) Mean from all complete days using both positive and negative readings.

POTENTIAL GRADIENT (reduced to level surface, Paddock site)

Kelvin electrograph standardized by Wilson readings, underground laboratory
Mean values for periods of sixty minutes between exact hours, G.M.T.

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	JULY, factor 3·92				AUGUST, factor 4·17				SEPTEMBER, factor 4·17			
	2-3h.	8-9h.	14-15h.	20-21h.	2-3h.	8-9h.	14-15h.	20-21h.	2-3h.	8-9h.	14-15h.	20-21h.
						volts per metre						
1	140	175	190	165	215	435	365	275	175	475	285	400
2	140	330	155	305	325	375	0	365	375	515	185	200
3	280	280	190	280	300	200	100	175	250	315	125	165
4	270	235	175	115	325	225	135	235	115	275	75	100
5	45	190	130	270	125	50	-165	335	150	265	100	165
6	190	220	95	190	250	300	125	275	200	300	125	175
7	130	190	190	190	175	200	165	200	115	250	125	235
8	165	235	210	95	175	375	165	150	135	200	100	250
9	200	200	Z-	200	125	300	215	235	325	265	65	265
10	130	45	140	220	215	265	150	185	200	250	125	350
11	130	295	165	200	150	335	185	385	315	335	165	500
12	315	340	140	260	15	315	300	265	165	85	285	435
13	105	155	140	175	125	325	315	375	215	250	150	500
14	210	245	10	70	125	335	375	375	165	275	100	275
15	140	330	315	340	150	215	185	315	175	275	65	200
16	190	190	-375	220	125	400	225	185	175	265	200	285
17	835	-750	165	270	65	125	125	150	250	350	165	200
18	80	330	70	165	185	350	185	335	Z-	435	-165	275
19	260	280	140	95	165	375	315	315	200	365	425	215
20	130	210	115	235	215	335	250	335	100	235	-85	400
21	105	210	190	245	175	425	325	250	235	175	200	315
22	260	220	130	295	165	365	325	315	300	600	175	100
23	295	435	175	210	125	75	125	265	150	475	200	375
24	295	420	175	365	215	165	150	715	185	500	235	385
25	245	340	165	210	225	350	215	385	375	500	385	635
26	190	235	155	235	275	300	225	425	215	275	350	315
27	220	375	270	245	300	500	185	400	265	450	265	350
28	340	270	200	260	225	425	265	350	135	275	185	435
29	190	260	130	155	115	300	265	385	125	215	265	300
30	155	445	390	270	300	415	165	350	185	600	250	215
31	220	400	460	365	265	300	200	475				
(a)	213	269	178	223	195	305	218	315	206	335	191	301
(b)	213	238	160	224	195	305	199	315	206	331	182	301
Mean	(a) 221		(b) 209		(a) 258		(b) 253		(a) 258		(b) 255	

	OCTOBER, factor 4·10				NOVEMBER, factor 4·13				DECEMBER, factor 4·08			
	2-3h.	8-9h.	14-15h.	20-21h.	2-3h.	8-9h.	14-15h.	20-21h.	2-3h.	8-9h.	14-15h.	20-21h.
						volts per metre						
1	285	405	235	245	110	310	275	395	1275	2070	1140	565
2	260	380	370	345	100	85	85	385	465	725	760	905
3	185	590	540	405	235	310	0	395	550	480	725	75
4	110	565	470	590	175	300	200	470	270	430	465	455
5	75	270	295	455	160	175	250	200	-295	-735	270	270
6	320	-	245	490	510	720	275	1155	75	-295	415	405
7	345	245	345	310	1375	570	300	335	-10	270	415	565
8	220	270	170	345	175	300	385	370	-1225	845	295	-220
9	245	655	195	345	125	110	260	310	195	220	210	465
10	160	295	245	295	100	275	250	585	390	490	770	725
11	160	380	210	405	225	85	235	235	405	430	745	725
12	185	295	195	310	125	75	110	370	370	490	245	255
13	220	335	345	330	225	445	320	445	125	330	210	170
14	270	295	170	615	310	595	-125	-445	195	195	270	370
15	480	565	170	380	370	335	395	435	110	405	370	430
16	195	320	330	330	350	570	360	620	210	345	195	0
17	135	195	270	395	275	610	370	545	-10	305	305	-245
18	185	370	295	220	385	395	680	520	85	-220	660	590
19	455	320	170	380	-50	310	360	560	135	380	505	145
20	355	420	565	430	310	360	175	320	245	355	345	295
21	445	935	355	445	60	185	210	135	280	440	295	345
22	180	60	285	320	135	320	25	370	160	330	380	455
23	110	-100	320	565	185	310	250	335	170	430	370	440
24	210	490	210	515	265	620	320	485	255	415	195	60
25	245	210	580	490	160	520	360	570	75	270	-25	0
26	185	330	345	395	235	620	570	645	110	245	295	525
27	170	455	395	405	360	570	460	-10	-125	125	100	295
28	245	455	540	600	285	265	435	-125	135	195	390	440
29	150	380	580	355	-60	200	275	470	220	615	430	590
30	160	170	420	395	485	510	495	420	345	590	525	710
31	220	135	195	270					390	685	760	675
(a)	231	372	324	399	279	369	299	447	278	468	435	412
(b)	228	356	327	396	257	369	285	383	180	382	420	370
Mean	(a) 331		(b) 327		(a) 349		(b) 323		(a) 398		(b) 338	

The factor used for converting the potential at the collector to potential gradient in volts per metre in the open is given for each month.

	(a)	255	365	298	367
	(b)	227	335	272	337
Annual means		(a) 321		(b) 293	

POTENTIAL GRADIENT (reduced to level surface): DIURNAL INEQUALITIES

The departures from the mean of the day are adjusted for non-cyclic change†

Selected quiet days

197 KEW OBSERVATORY

	Hour G.M.T. 0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	Non-cyclic change†	Mean
	volts per metre																									
Jan.	-78	-92	-137	-155	*-159*	-119	-112	-66	+15	+54	+26	+43	+39	+12	+33	+52	+108	+90	+103	+123	*+137*	+66	+33	-15	-35	482
Feb.	-105	-116	-161	-183	-201	*-206*	-155	-43	+69	+101	+120	+111	+93	+60	+91	+86	+130	*+127*	+107	+52	+55	+23	-4	-52	-14	489
Mar.	+52	+58	+35	+33	+2	+35	+91	*+167*	+163	+135	+39	-7	-183	-183	*-199*	-169	-145	-136	-48	+51	+52	+48	+41	+71	...	534
Apr.	-29	-54	-78	*-95*	-68	-24	+39	+79	*+93*	+54	0	0	-13	-10	-31	-34	-48	-24	-14	+39	+87	+75	+49	+8	+25	271
May	-28	-12	0	-2	+20	+40	+100	*+136*	+85	+34	-19	-30	-24	-37	*-56*	-46	-27	-34	-29	-8	-18	-10	-26	-13	-12	257
June	-8	-1	+8	+1	+21	+58	+69	*+71*	+54	-11	-26	-47	-47	-49	*-54*	-35	-28	-18	-11	+12	+14	+20	+7	+2	-29	184
July	+7	+2	-5	+8	+31	+57	+78	*+79*	+53	+38	+12	-35	-59	-49	-56	-55	-59	*-60*	-42	-9	+27	+22	+4	+10	+76	231
Aug.	-34	-47	*-56*	-52	-48	-37	+18	+75	+70	+33	+18	0	-33	-45	-48	-40	-42	-36	+15	+75	*+87*	+75	+37	+17	-39	261
Sept.	-38	-56	-49	-37	-19	-6	+35	*+117*	+115	+48	+3	-31	-58	*-68*	-67	-60	-48	-22	+17	+73	+66	+95	+10	-22	+45	254
Oct.	-56	-84	-85	-97	-101	*-110*	-91	-17	+56	+83	+27	+31	+7	+20	+15	+18	+13	+50	+80	*+91*	+82	+57	+23	-11	+12	321
Nov.	-32	-58	-103	-113	*-129*	-90	-41	-16	+51	+75	+50	+15	-40	-53	-38	+1	+59	+82	+98	*+99*	+68	+71	+23	+22	+21	357
Dec.	-65	-94	-128	-127	*-141*	-121	-114	-10	+68	+62	+60	+52	+11	+10	+28	+35	+61	+72	+78	*+89*	+63	+66	+72	-28	...	426
Year	-35	-46	-63	-68	*-66*	-44	-7	-48	*+74*	+59	+26	+9	-26	-33	-32	-21	-2	+8	+29	+57	+60	+51	+22	-1	...	339
Winter	-70	-90	-132	-145	*-157*	-134	-105	-34	+51	+73	+64	+55	+26	+7	+29	+43	+89	+93	*+97*	+91	+81	+57	+31	-18	...	439
Equinox	-18	-34	-44	-49	-47	-26	+19	+87	*+107*	+80	+17	-2	-62	-60	*-71*	-61	-57	-33	+9	+63	+72	+69	+31	+11	...	345
Summer	-16	-15	-13	-11	+6	+29	+66	*+90*	+65	+23	-4	-28	-41	-45	*-53*	-44	-39	-37	-17	+17	+27	+27	+5	+4	...	233

Winter: January, February, November, December
Equinox: March, April, September, October
Summer: May to August

†See p. 10, *Observatories' Year Book, 1938*.

AIR POLLUTION: HOURLY MEANS FOR EACH MONTH

Complete days only

198 KEW OBSERVATORY

	Hour G.M.T. 0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	Mean	No. of days used
	milligrams per cubic metre																									
Jan.	0·14	0·13	0·11	0·09	0·09	*0·08*	0·09	0·11	0·15	0·18	0·19	0·17	0·15	0·13	0·12	0·15	0·17	0·18	0·19	0·21	*0·22*	0·19	0·17	0·16	0·15	31
Feb.	0·06	0·04	0·04	0·05	0·05	*0·04*	0·05	0·08	0·10	0·11	0·15	0·15	0·14	0·13	0·13	0·14	0·14	0·14	*0·16*	0·15	0·16	0·14	0·11	0·09	0·11	28
Mar.	0·04	0·03	*0·03*	*0·03*	*0·03*	0·04	0·05	0·09	*0·10*	*0·10*	0·08	0·07	0·08	0·07	0·06	0·06	0·07	0·09	0·09	0·08	0·08	0·08	0·05	0·05	0·06	31
Apr.	0·04	0·04	0·05	0·05	0·05	0·05	*0·06*	0·06	0·05	0·03	0·03	0·02	0·02	0·02	*0·02*	*0·02*	0·02	0·03	0·04	0·05	0·04	0·04	0·04	0·04	0·04	30
May	0·05	0·05	0·06	0·06	0·07	0·11	*0·11*	0·10	0·05	0·04	*0·02*	0·02	0·03	0·03	0·03	0·03	0·03	0·03	0·04	0·04	0·05	0·05	0·04	0·04	0·05	31
June	0·01	0·01	0·01	0·01	0·02	0·03	*0·04*	*0·04*	0·03	0·01	0·01	0·00	*0·00*	*0·00*	0·00	0·00	0·00	0·00	0·01	*0·00*	*0·00*	0·00	0·00	0·01	0·01	28
July	0·01	0·02	0·02	0·02	0·04	*0·05*	*0·05*	*0·05*	*0·05*	0·03	0·01	0·01	*0·01*	0·01	0·01	0·01	0·01	0·02	0·02	0·02	0·02	0·02	0·01	0·02	0·02	31
Aug.	0·01	0·02	0·02	0·02	0·02	0·03	*0·04*	0·03	0·02	0·01	0·00	0·01	0·00	*0·00*	*0·00*	*0·00*	*0·00*	*0·00*	*0·00*	*0·00*	0·00	0·01	0·01	0·01	0·01	31
Sept.	0·02	0·02	0·02	0·02	0·03	0·03	0·04	0·05	*0·07*	0·03	0·02	0·02	0·01	0·02	0·01	*0·00*	*0·00*	0·01	0·02	0·02	0·02	0·02	0·02	0·03	0·02	30
Oct.	0·13	0·13	0·13	0·12	0·12	0·12	0·13	0·15	*0·17*	0·14	0·12	0·08	0·07	0·07	0·07	*0·05*	0·07	0·10	0·13	0·15	0·16	0·16	0·15	0·14	0·12	31
Nov.	0·10	0·07	0·06	0·05	0·05	*0·04*	0·06	0·08	0·10	0·10	0·10	0·09	0·09	0·09	0·10	0·10	0·13	0·15	0·17	*0·19*	0·17	0·15	0·15	0·12	0·10	30
Dec.	0·12	0·09	0·09	0·09	*0·08*	0·09	0·10	0·11	0·13	0·16	0·17	0·15	0·15	0·16	0·18	0·20	0·22	0·23	0·23	*0·24*	0·23	0·22	0·18	0·14	0·15	31
Year	0·06	0·05	0·05	*0·05*	0·05	0·06	0·07	0·08	0·09	0·08	0·08	0·07	0·06	0·06	0·06	0·06	0·07	0·08	0·09	*0·10*	0·10	0·09	0·08	0·07	0·07	363
Winter	0·11	0·08	0·07	0·07	0·07	*0·06*	0·07	0·09	0·12	0·14	0·15	0·14	0·13	0·13	0·13	0·15	0·17	0·17	0·19	*0·20*	0·19	0·17	0·15	0·13	0·13	120
Spring	0·04	*0·03*	0·04	0·04	0·04	0·05	0·05	*0·07*	*0·07*	0·07	0·05	0·05	0·05	0·05	0·04	0·04	0·05	0·06	0·07	0·07	0·06	0·06	0·05	0·05	0·05	61
Autumn	0·07	0·07	0·07	0·07	0·07	0·07	0·09	0·10	*0·12*	0·09	0·07	0·05	0·04	0·05	0·04	*0·03*	0·03	0·05	0·07	0·09	0·09	0·09	0·09	0·09	0·07	61
Summer	0·02	0·03	0·03	0·03	0·04	0·05	*0·06*	0·05	0·04	0·02	0·01	*0·01*	*0·01*	*0·01*	*0·01*	*0·01*	*0·01*	0·01	0·02	0·01	0·02	0·02	0·01	0·02	0·02	121